TABLE OF CONTENTS

Index to printed record	pp.	1-78
List of exhibits in numerical order including those not printed	pp.	79-189
Alphabetical subject index to entire transcript	pp.	191-197

INDEX TO PRINTED RECORD

VOL. I

	Original	Print
Record from D. C. U. S., Northern District of Ohio	1	1
Complaint	1	2
Motion to make complaint more definite and for a bill of particulars by:		
Ball Bros. Co. et al	101	72
Hartford-Empire Co. et al	104	74
Owens-Illinois Glass Co. et al	111	81
Anchor-Hocking Glass Corp. et al	115	84
Lynch Corp. et al	121	88
Corning Glass Works, et al	125	89
Bill of particulars in response to motion of:		
Ball Bros. et al	130	93
Hartford-Empire Co. et al	133	95
Owens-Illinois Glass Co. et al	158	115
Anchor-Hocking Glass Corp. et al	167	123
Lynch Corp. et al	172	126
Corning Glass Works et al	174	127
Answer of:		
Thatcher Mfg. Co. et al	179	131
Glass Container Assn. et al	192	140
Liberty Glass Co. et al (omitted in printing)	197	
Hazel-Atlas Glass Co. et al	203	147
Owens-Illinois Glass Co. et al	231	170
Lynch Corp. et al	306	224
Ball Brothers Co. et al	320	234
Anchor-Hocking Glass Corp. et al	371	274
Corning Glass Works et al	434	320
Empire Machine Co. et al	452	335
Hartford-Empire Co. et al	489	367
G. F. Rieman (omitted in printing)	564	
Supplemental answer of:		
Corning Glass Works and Empire Machine Co. et al	573	429
Schedule A. Proposed consent decree	577	431
Ball Bros. Co. et al	581	434
Hartford-Empire Co. et al	584	435
Schedule A. Letter to licensees	593	441
Schedule B. Proposed consent decree	595	443
Lynch Corp. et al	605	450
Affidavit of F. Goodwin Smith	607	451
Exhibit 1. Letter to licensees	615	456
Exhibit 2. Supplemental agreement between Hartford-Empire Co. and licensees	617	458
Plaintiff's motion for order impounding funds	624	461
Affidavit of J. H. McNash	635	467
Exhibit A. List of Hartford suits and patents against Hazel-Atlas in June 1932	655	483

	Original	Print
Record from D. C. U. S., Northern District of Ohio—Contd.		
Plaintiff's motion for order impounding funds—Contd.		
Affidavit of John Carnahan	656	484
Exhibit E. List of Hazel-Atlas feeder and former patents	662	489
Affidavit of Samuel S. Isaaks	663	490
Exhibit A. Agreement of May 20, 1909 between the Owens Bottle Machine Co., the Toledo Glass Co. and others	665	490
Affidavit of Robson D. Brown	672	497
Clerk's entry, noting sustaining of motion for order impounding funds.....(omitted in printing)..	688	
Objections of defendant Hartford-Empire Co. to plaintiff's request for findings and conclusions in support of order impounding funds	689	505
Affidavit of Theodore L. Champeau	694	508
Findings of fact in support of order impounding funds	707	514
Conclusions of law in support of order impounding funds	711	518
Interlocutory order impounding funds	712	519
Exhibit A. Royalties payable by Hazel-Atlas	715	521
Exhibit B. Payments by Hartford	719	524
Motion for dismissal by:		
Lynch Corp. et al	722	526
Anchor-Hocking Glass Corp. et al	723	526
G. C. A., Stevenson and Ackerman	725	527
Liberty Glass Co. et al.....(omitted in printing)..	727	
Thatcher Mfg. Co. et al	728	528
Corning Glass Works et al	729	529
Order overruling motion of Lynch Corp. et al	730	529
Order overruling motion of G.C.A., sustaining motions of Liberty Glass Co. et al. and Anchor-Hocking et al., except I. J. Collins, etc	731	530
Plaintiff's motion for rehearing of Anchor-Hocking motion to dismiss	732	530
Order noting dismissal of complaint as to Arthur E. Ball and other individual defendants, overruling, except as to Dilworth, Fisher and Fulton, of Government's motion for rehearing Anchor-Hocking motion for dismissal, etc..	733	531
Order dismissing Liberty Glass Co. et al. (omitted in printing)	734	
Order dismissing Anchor-Hocking Glass Co. et al., except Collins, Dilworth, Fisher and Fulton	735	532
Stipulation as to use of uncertified copies of patents (omitted in printing)	736	
Motion of Anchor-Hocking Glass Co. et al., to strike evidence	739	533
Plaintiff's memorandum re scope of evidence admissible in support of defendants' case	743	535
Plaintiff's memorandum in opposition to admissibility of evidence to show validity of patents	749	538
Ruling on admissibility of certain exhibits	796	572
Transcript of pre-trial proceedings	798	573
Transcript of trial proceedings	1221	634

VOLUMES I TO IX, INCLUSIVE

INDEX OF WITNESSES

TESTIMONY OF:	Orig.	Print (Vol.)
Ackerman, Emory G.		
Direct	6274	3460 (v)
Cross	6423	3552 (v)
Redirect	6491	3594 (v)
Recross	6494	3596 (v)
Avery, C. R.		
Stipulated...(omitted in printing)..	12214	
Baker, H. H.		
Direct	4291	2298 (iii)
Cross	4324	2316 (iii)
Redirect	4332	2321 (iii)
Recross	4334	2323 (iii)
Ball, E. Arthur		
Direct	11601	6537 (ix)
Cross	11614	6546 (ix)
Redirect	11624	6553 (ix)
Recross	11626	6555 (ix)
Ball, Frank C.		
Deposition read	7696	4261 (vi)
Ball, George A.		
Direct	5527	3027 (iv)
Cross	5606	3070 (iv)
Redirect	5618	3078 (iv)
Recross	5621	3080 (iv)
Bartlett, E. E.		
Stipulated...(omitted in printing)..	12161	
Batchell, G. W.		
Direct	12051	6774 (ix)
Cross	12053	6775 (ix)
Belknap, C. B.		
Direct	3340	1769 (iii)
Direct (Recalled)	3610	1897 (iii)
Direct (Recalled)	11463	6455 (ix)
Cross	11522	6490 (ix)
Redirect	11568	6519 (ix)
Recross	11572	6522 (ix)
Blair, J. C.		
Direct	4223	2266 (iii)
Cross	4284	2293 (iii)
Blunt, Royden A.		
Stipulated	11935	6716 (ix)
Bowes, Urban E.		
Direct	6268	3456 (v)
Direct	11578	6524 (ix)
Stipulated	12031	6764 (ix)
Brown, Robson D.		
Direct	7251	4005 (vi)
Cross	7313	4046 (vi)
Redirect	7361	4077 (vi)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
Brown, Robson D.—Continued		
Recross	7876	4088 (vi)
Direct	10787	6041 (viii)
Direct	10972	6151 (viii)
Cross	10975	6153 (viii)
Redirect	11060	6209 (viii)
Direct	11075	6218 (viii)
Recross	11078	6220 (viii)
Direct	11439	6440 (ix)
Cross	11457	6452 (ix)
Direct	11829	6666 (ix)
Cross	11892	6696 (ix)
Redirect	11897	6699 (ix)
Campbell, E. S.		
Stipulated...(omitted in printing)	12139	
Canfield, Robert W.		
Direct	10768	6028 (viii)
Cross	10784	6040 (viii)
Carnahan, John W.		
Direct	9990	5593 (viii)
Cross	10039	5626 (viii)
Redirect	10044	5630 (viii)
Carter, Henry W.		
Direct	2998	1571 (iii)
Direct	3143	1656 (iii)
Cross	3172	1671 (iii)
Coleman, S. A.		
Direct	3429	1825 (iii)
Cross	3450	1838 (iii)
Redirect	3499	1867 (iii)
Collin, Harry E.		
Direct	4695	2526 (iv)
Cross	4702	2531 (iv)
Redirect	4708	2535 (iv)
Collins, I. J.		
Direct	5303	2892 (iv)
Direct	5440	2975 (iv)
Cross	5496	3009 (iv)
Redirect	5520	3025 (iv)
Crile, W. M.		
Direct	12070	6786 (ix)
Cross	12073	6789 (ix)
Redirect	12077	6791 (ix)
Day, Arthur L., Dr.		
Direct	9800	5485 (vii)
Cross	9822	5499 (vii)
Day, George E.		
Direct	3103	1630 (iii)
Cross	3124	1643 (iii)

INDEX OF WITNESSES—Continued

Testimony of—Continued		
Day, George E.—Continued	Orig.	Print (Vol.)
Redirect	3139	1653 (III)
Recross	3141	1654 (III)
Redirect	3142	1655 (III)
Donnan, E. A.		
Stipulated...(omitted in printing)	12221	
Dorsey, Vernon A.		
Direct	11901	6700 (IX)
Cross	11908	6704 (IX)
Redirect	11921	6712 (IX)
Dorsey, Vernon M.		
Direct	6821	3774 (V)
Cross	6894	3809 (V)
Redirect	7026	3876 (V)
Direct	8706	4855 (VII)
Direct	8978	4993 (VII)
Cross	9213	5125 (VII)
Redirect	9473	5303 (VII)
Recross	9504	5317 (VII)
Direct	10636	5971 (VIII)
Cross	10698	6000 (VIII)
Direct	10763	6025 (VIII)
Direct	10955	6142 (VIII)
Cross	10956	6142 (VIII)
Redirect	10960	6144 (VIII)
Dugan, Walkerman D.		
Direct	3792	2009 (III)
Cross	3817	2023 (III)
Direct	3822	2026 (III)
Recross	3825	2028 (III)
Redirect	3825	2029 (III)
Easterby, E. D.		
Stipulated...(omitted in printing)	12147	
Eldred, Roger M.		
Direct	6133	3572 (V)
Direct	6497	3597 (V)
Cross	6530	3614 (V)
Redirect	6553	3626 (V)
Recross	6566	3634 (V)
Direct	10275	5762 (VIII)
Cross	10361	5816 (VIII)
Redirect	10387	5833 (VIII)
Epstein, Ralph C.		
Direct	10394	5838 (VIII)
Cross	10515	5896 (VIII)
Redirect	10530	5909 (VIII)
Falck, Alexander D.		
Direct	3182	1675 (III)
Cross	3317	1755 (III)
Redirect	3334	1766 (III)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
Falck, Alexander D.—Continued		
Direct	9828	5504 (VII)
Cross	9913	5547 (VII)
Direct	9968	5580 (VIII)
Fingold, A. S.		
Direct	4842	2610 (IV)
Cross	4868	2624 (IV)
Redirect	4886	2635 (IV)
Floan, Albert B.		
Direct	4934	2666 (IV)
Cross	4954	2678 (IV)
Redirect	4959	2681 (IV)
Recross	4959	2682 (IV)
Foster, J. M.		
Stipulated...(omitted in printing)..	12225	
Gayner, J. M.		
Stipulated...(omitted in printing)..	12182	
Geer, Paul L.		
Direct	3502	1868 (III)
Cross	3523	1878 (III)
Redirect	3543	1891 (III)
Recross	3546	1892 (III)
Direct	12054	6776 (IX)
Cross	12056	6777 (IX)
Redirect	12067	6784 (IX)
Recross	12069	6785 (IX)
Green, Victor J.		
Direct	12078	6792 (IX)
Cross	12086	6798 (IX)
Redirect	12096	6805 (IX)
Recross	12101	6808 (IX)
Hall, V. L.		
Direct	11726	6618 (IX)
Cross	11742	6629 (IX)
Redirect	11760	6640 (IX)
Hamilton, J. T.		
Stipulated...(omitted in printing)..	12197	
Hanson, Jewell R.		
Direct	9713	5434 (VII)
Cross	9777	5471 (VII)
Redirect	9794	5482 (VII)
Harding, John W.		
Direct	6654	3686 (V)
Cross	6657	3688 (V)
Hartley, Harry D.		
Direct	6666	3694 (V)
Direct	7039	3883 (V)
Cross	7060	3897 (V)
Redirect	7121	3935 (V)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
Hatch, R. F.		
Direct	5632	3086 (IV)
Cross	5781	3175 (V)
Redirect	5843	3209 (V)
Recross	5850	3214 (V)
Redirect and Recross	5851	3214 (V)
Heuisler, J. S.		
Stipulated...(omitted in printing)	12207	
Herger, H. C.		
Stipulated...(omitted in printing)	12127	
Holmes, Minot Kingman		
Direct	11299	6356 (IX)
Hunter, Alfred R.		
Direct	9512	5322 (VII)
Cross	9568	5399 (VII)
Redirect	9708	5431 (VII)
Kucera, Peter		
Direct	4889	2637 (IV)
Cross	4906	2649 (IV)
Redirect	4931	2665 (IV)
Recross	4932	2665 (IV)
LaFrance, Richard		
Direct	11152	6261 (VIII)
Cross	11218	6305 (VIII)
Redirect	11224	6308 (VIII)
Recross	11227	6310 (VIII)
Lamb, R. M.		
Stipulated...(omitted in printing)	12231	
Lang, G. F.		
Stipulated...(omitted in printing)	12167	
Levis, William E.		
Direct	3702	1951 (III)
Direct	3944	2096 (III)
Cross	4202	2250 (III)
Redirect	4215	2257 (III)
Littler, F. G.		
Direct	11629	6556 (IX)
Cross	11649	6569 (IX)
Redirect	11657	6573 (IX)
Cross	11659	6574 (IX)
Lorens, Edward H.		
Direct	10046	5630 (VIII)
Cross	10155	5694 (VIII)
Redirect	10167	5702 (VIII)
Marble, W. B.		
Stipulated...(omitted in printing)	12189	
Martin, Emmet F.		
Direct	5858	3215 (V)
Cross	5861	3218 (V)
Redirect	5867	3222 (V)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
McCrystal, Robert		
Direct	7210	3977 (VI)
Cross	7233	3993 (VI)
Redirect	7240	3997 (VI)
Direct	7250	4004 (VI)
Stipulated...(omitted in printing)	12152	
McLaughlin, John Edward		
Direct	11228	6311 (VIII)
Cross	11294	6353 (IX)
Redirect	11297	6355 (IX)
McNash, J. Harrison		
Direct	4335	2323 (III)
Direct	4485	2406 (IV)
Cross	4648	2501 (IV)
Cross	4711	2536 (IV)
Redirect	4760	2562 (IV)
McNerney, John H.		
Direct	5398	2950 (IV)
Cross	5423	2964 (IV)
Redirect	5433	2970 (IV)
Direct	11082	6221 (VIII)
Direct	11326	6369 (IX)
Cross	11403	6417 (IX)
Redirect	11415	6426 (IX)
Milner, Edwin E.		
Direct	11660	6575 (IX)
Direct	11689	6594 (IX)
Cross	11717	6612 (IX)
Myers, G. E.		
Direct	11677	6586 (IX)
Cross	11685	6592 (IX)
Mount, A. J.		
Stipulated...(omitted in printing)	12174	
Naylor, James E.		
Direct	5868	3222 (V)
Nesbitt, Frank T.		
Direct	11416	6426 (IX)
Norton, H. H. (omitted in printing)	4477	
O'Connor, C. J.		
Stipulated...(omitted in printing)	12134	
Ohrn, Carl B.		
Direct	7241	3998 (VI)
Cross	7241	3999 (VI)
Pease, Alfred M.		
Direct	5886	3233 (V)
Cross	5958	3280 (V)
Redirect	6021	3319 (V)
Recross	6053	3339 (V)
Redirect	6055	3340 (V)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
Peller, Karl E.		
Direct	7739	4283 (vi)
Cross	8295	4601 (vi)
Redirect	8631	4807 (vii)
Recross	8691	4846 (vii)
Petty, F. J.		
Direct	11767	6643 (ix)
Cross	11774	6647 (ix)
Pollock, Franklin B.		
Direct	6573	3637 (v)
Cross	6579	3641 (v)
Redirect	6583	3644 (v)
Recross	6583	3644 (v)
Ramsey, Ellwood		
Direct	7468	4140 (vi)
Cross	7474	4144 (vi)
Redirect	7487	4152 (vi)
Recross	7491	4155 (vi)
Rau, J.		
Stipulated...(omitted in printing)..	12157	
Rieman, G. Fred		
Direct	3826	2029 (iii)
Cross	3914	2077 (iii)
Redirect	3940	2093 (iii)
Recross	3943	2095 (iii)
Safford, Arthur T., Jr.		
Direct	7148	3952 (vi)
Cross	7163	3959 (vi)
Redirect	7166	3962 (vi)
Cross	7172	3965 (vi)
Redirect	7174	3965 (vi)
Direct	7378	4089 (vi)
Cross	7441	4127 (vi)
Direct	7494	4157 (vi)
Cross	7596	4217 (vi)
Redirect	7626	4233 (vi)
Direct	10170	5703 (viii)
Cross	10251	5748 (viii)
Redirect	10270	5759 (viii)
Direct	10390	5835 (viii)
Cross	10391	5836 (viii)
Saperston, Alfred M.		
Direct	5746	3153 (v)
Cross	5771	3168 (v)
Schwenzfeier, C. W.		
Direct	4217	2258 (iii)
Cross	4222	2262 (iii)

INDEX OF WITNESSES—Continued

Testimony of—Continued	Orig.	Print (Vol.)
Smith, F. Goodwin		
Direct	1221	635 (I)
Cross	2709	1393 (II)
Redirect	2864	1489 (II)
Recross	2893	1507 (II)
Soubier, Leonard D.		
Direct	11815	6652 (IX)
Cross	11835	6664 (IX)
Sullivan, Eugene C.		
Direct	9971	5582 (VIII)
Tassick, John A.		
Direct	11125	6245 (VIII)
Cross	11136	6253 (VIII)
Thompson, William H.		
Direct	6814	3771 (V)
Underwood, Roy R.		
Direct	2896	1508 (II)
Cross	2967	1551 (III)
VanBibber, Arthur E.		
Direct	8866	4948 (VII)
Cross	8964	4984 (VII)
Redirect	8974	4991 (VII)
Recross	8976	4992 (VII)
Wellinghoff, E. F.		
Direct	6124	3366 (V)
Cross	6132	3372 (V)
Werbe, T. C.		
Direct	4973	2690 (IV)
Cross	5213	2836 (IV)
Redirect	5275	2875 (IV)
Redirect	5283	2879 (IV)
Recross	5299	2889 (IV)
Wheaton, F. E.		
Stipulated	11946	6723 (IX)
Williams, Lloyd T.		
Direct	6584	3645 (V)
Cross	6651	3685 (V)
Cross	6743	3738 (V)
Redirect	6793	3758 (V)
Recross	6812	3770 (V)
Wright, John H.		
Direct	6067	3343 (V)
Cross	6093	3346 (V)
Redirect	6108	3356 (V)

VOL. IX

Record from D. C. U. S., Northern District of Ohio—Continued	Original	Print
Transcript of post-trial proceedings	12321	6810
Argument on motion of Lynch Corp'n to dismiss	12321	6810
Ruling on motion of Lynch Corp'n	12362	6830
Argument on motion of Glass Container Association to dismiss	12365	6831
Ruling on motion of Anchor-Hocking Glass Corp'n	12494	6842
Argument and ruling on the motion of the Buck Glass Company and others for leave to appear as amici curiae	12502	6845
Statement by Court as to motions and as to findings and conclusions	12517	6853
Final argument for Glass Container Association et al.	13064	6855
Argument on objections to proposed decree	13290	6876
Motion by Buck Glass Co. and other licensees to appear as amicus curiae	13417	6914
Letter—Walter H. Buck to S. S. Wall, enclosing copy of aforesaid Motion (omitted in printing)	13421	
Order overruling motion of Buck Glass Co	13422	6917
Plaintiff's proposed findings of fact	13423	6917
Plaintiff's proposed conclusions of law	13587	7071
Requested findings of fact and conclusions of law by:		
Corning Glass Works et al. and associated defendants of Empire Machine Company	13616	7095
I. J. Collins et al	13634	7106
Anchor-Hocking Glass Corp'n et al	13640	7110
Thatcher Mfg. Co	13645	7113
Glass Container Association et al	13653	7120
Hazel-Atlas Glass Co. et al	13662	7128
Hartford-Empire Co. et al	13676	7140

VOL. X

Lynch Corporation et al	13768	7212
Owens-Illinois Glass Co. et al	13789	7229
Ball Brothers Co. et al	13828	7259
Opinion, Kloeb, J. (Printed in a separate volume)	13851	
Order appointing James A. Shanley as Receiver for Hartford-Empire Company (Printed in opinion volume)	13989	
Bond of receiver (omitted in printing)	13993	
Findings of fact and conclusions of law	13997	7277
Notice of submission of proposed final judgment	14130	7420
Proposed final judgment	14133	7422
Objections to proposed final judgment of:		
Lynch Corp'n et al	14180	7459
Owens-Illinois Glass Co. et al	14191	7467
Exceptions of Hazel-Atlas Glass Company to findings of fact and conclusions of law	14195	7469
Objections of Hazel-Atlas Glass Co. et al. to proposed final judgment	14198	7471

Record from D. C. U. S., Northern District of Ohio—Continued	Original	Print
Objections and Exceptions of G.C.A., Stevenson and Ackerman to findings and conclusions	14316	7485
Objections of G.C.A., Stevenson and Ackerman to form of proposed final judgment	14318	7486
Objections of H-E. and certain individual defendants as to form of final judgment	14228	7495
Statement of objections of H-E. and certain individual defendants as to relief as set forth in proposed final judgment	14250	7510
Objections of Corning Glass Works, Empire Machine and individual defendants to form of decree	14265	7520
Objections of Corning, Empire Machine and individual defendants to findings of fact and conclusions of law, and to the judgment	14271	7525
Memorandum on behalf of Owens and individual defendants in support of changes in form of judgment (omitted in printing)	14274	
Motion of Hartford-Empire to vacate order appointing Receiver	14305	7526
Notice of motion to vacate order appointing Receiver and certificate of service	14309	7529
Application by Hartford-Empire for order fixing time for hearing prior to entry of final judgment herein of "Motion to vacate order appointing Receiver"	14312	7531
Memorandum in support of aforesaid motion	14314	7531
Affidavit of S. S. Wall and exhibit thereto	14315	7532
Motion by Hartford-Empire to vacate order appointing Receiver	14321	7535
Written statement of reasons in support of motion to vacate order appointing Receiver	14326	7538
Summary of reasons	14326	7538
Affidavit of Roger M. Eldred	14335	7545
Affidavit of Theodore L. Champeau and exhibits thereto	14337	7546
Letter S. S. Wall to Clerk of Court advising filing of motion to vacate, and also application for order fixing time for hearing prior to entry of final judgment	14345	7551
Plaintiff's memorandum of law showing necessity and justification for receivership	14347	7552
Affidavit of S. S. Isseks re appointment of receiver	14354	7557
Affidavit of J. A. Shanley, receiver with Hartford-Empire balance sheet of 8/31/42 and letter by Shanley to American Thermos Bottle Co., dated 9/3/42	14361	7563
Motion for stay by Hartford-Empire	14373	7572
Proposed order of stay	14377	7575
Notice of motion for order of stay and certificate of service	14379	7576
Affidavit of F. G. Smith	14384	7578
Written statement of reasons in support of motion	14396	7586
List of authorities relied on	14397	7586
Summary of reasons	14398	7587
Affidavit of J. A. Shanley in answer to statements relating to necessity and effect of receivership and exhibits thereto	14404	7591

Record from D. C. U. S., Northern District of Ohio—Continued	Original	Print
Order overruling motion to vacate order appointing receiver	14427	7611
Order overruling Hartford-Empire's application for order fixing time for hearing prior to final judgment of motion to vacate order appointing receiver, and motion to vacate order appointing receiver	14428	7612
Order overruling Hartford-Empire's motion for order staying appointment of receiver	14429	7613
Proposed final judgment	14430	7613
Final judgment	14480	7653
Objections and exceptions by Glass Container Association, after final judgment, to findings of fact and conclusions, and motion to amend same, with proof of service	14516	7693
Motion for new trial by G.C.A., Stevenson and Ackerman, and certificate of service	14519	7694
Court order overruling G.C.A. motion to require Court to adopt as its findings and conclusions, findings and conclusions submitted by G.C.A.	14522	7695
Court order overruling motion for new trial, filed by G.C.A.	14523	7696
Motion of Lynch and associated defendants for new trial and other relief	14524	7696
Court order overruling motion of Lynch et al. for new trial and to amend or make additional findings and conclusions, and to reconsider motion for judgment filed by Lynch et al.	14528	7699
Motion by Ball Bros. and associated defendants to amend findings of fact and judgment, and motion to vacate order as to impounding of monies	14529	7700
Order overruling Ball's motion to amend findings and conclusions and to vacate impounding order	14542	7708
Appeal papers of Hartford-Empire:		
Petition for appeal (omitted in printing)	14543	
Assignment of errors and prayer for reversal	14553	7708
Order allowing appeal	14603	7744
Bond (omitted in printing)	14604	
Motion for stay (omitted in printing)	14610	
Order of stay	14612	7745
Citation and service (omitted in printing)	14616	
Affidavit of Jerrold Van Cise on serving order of stay (omitted in printing)	14619	
Appeal papers of Owens-Illinois:		
Petition for appeal and assignments of error	14622	7746
Order allowing appeal	14557	7777
Bond on appeal (omitted in printing)	14668	
Supersedeas and stay order	14670	7777
Affidavit of service (omitted in printing)	14671	
Citation and service (omitted in printing)	14725	
Appeal papers of Hazel-Atlas:		
Petition on appeal (omitted in printing)	14727	
Assignment of errors and prayer for reversal	14731	7778
Order allowing appeal	14768	7806

Record from D. C. U. S., Northern District of Ohio—Continued

	Original	Print
Appeal papers of Hazel-Atlas—Continued		
Supersedeas and cost bond.....(omitted in printing)..	14767	
Motion for stay.....(omitted in printing)..	14769	
Order of stay.....	14770	7807
Citation and service.....(omitted in printing)..	14774	
Appeal papers of Corning and Empire:		
Petition for appeal.....(omitted in printing)..	14776	
Assignments of error and prayer for reversal.....	14784	7808
Order allowing appeal.....	14818	7833
Bonds on appeal.....(omitted in printing)..	14820	
Motion for stay.....(omitted in printing)..	14832	
Order of stay.....	14834	7834
Citation and service.....(omitted in printing)..	14838	
Affidavit of service of order of stay (omitted in printing)	14841	
Appeal papers of Thatcher:		
Petition for appeal.....(omitted in printing)..	14844	
Assignment of errors.....	14860	7835
Order allowing appeal.....	14875	7847
Supersedeas bond.....(omitted in printing)..	14877	
Citation and service.....(omitted in printing)..	14883	
Appeal papers of Lynch:		
Petition for appeal.....(omitted in printing)..	14885	
Assignment of errors and prayer for reversal.....	14893	7849
Order allowing appeal.....	14918	7869
Supersedeas bond.....(omitted in printing)..	14920	
Citation and service.....(omitted in printing)..	14924	
Appeal papers of Ball Bros.:		
Petition for appeal.....(omitted in printing)..	14926	
Assignment of errors and prayer for reversal.....	14939	7870
Order allowing appeal.....	14959	7881
Bond on appeal.....(omitted in printing)..	14960	
Motion for stay.....(omitted in printing)..	14962	
Order of stay.....	14963	7882
Citation and service.....(omitted in printing)..	14967	
Appeal papers of Glass Container Association:		
Petition for appeal.....(omitted in printing)..	14969	
Assignments of error and prayer for reversal.....	14977	7883
Order allowing appeal.....	14996	7898
Supersedeas bond.....(omitted in printing)..	14997	
Motion for stay.....(omitted in printing)..	15000	
Order of stay.....	15001	7899
Citation and service.....(omitted in printing)..	15004	
Appeal papers of I. J. Collins:		
Petition for appeal.....(omitted in printing)..	15006	
Assignments of error and prayer for reversal.....	15022	7900
Order allowing appeal.....	15039	7912
Supersedeas bond.....(omitted in printing)..	15040	
Supersedeas and stay.....	15042	7913
Citation and service.....(omitted in printing)..	15044	

Record from D. C. U. S., Northern District of Ohio—Continued	Original	Print
Appeal papers of J. D. Dilworth and others:		
Petition for appeal.....(omitted in printing)..	15045	
Assignments of error and prayer for reversal.....	15062	7913
Order allowing appeal.....	15078	7925
Supersedeas bond.....(omitted in printing)..	15079	
Supersedeas and stay order....(omitted in printing)..	15081	
Citation and service.....(omitted in printing)..	15083	

EXHIBITS

STIPULATIONS:		
Exhibit 415. Hartford—re total salaries and wages, annual royalties, receipts of Hartford—each year 1923–1939, incl—(a) from license fees and (b) from sales of parts; and litigation expenses.....	15085	7926
Exhibit 782. Owens—re gross sales of containers for 1921, 1923, 1925, 1927, 1929 and 1931 to 1939, incl.; production in gross for same years; gross sales others are: 1931–1939, incl. Royalties received by Owens 1920–1939, incl., and royalties paid by Owens 1920–1939, incl.....	15091	7929
Exhibit 946. Hazel-Atlas, with exhibits as follows:....	15103	7931
Ex. A—		
Balance sheets Dec. 1924 to Dec. 1931, incl..	15106	7933
Consolidated income accounts 1924–1931, incl.	15114	7941
Ex. B—		
Lists of prices and shipments 1920–1939, incl..	15122	7949
Fruit jars and jellies.....	15123	7950
Beer bottles.....	15128	7954
Opal jars.....	15131	7956
Ex. C—		
Lists of H-A. patents owned 10/19/38 and since acquired.....	15132	7956
"Questionnaire 10/19/38—Patents—Items No. 1".....	15133	7957
List of patents owned.....	15134	7957
List of patents acquired since 10/19/38.....15142a		7963
Ex. D—H-A. expenses—Hartford patent litigation 1927–1932.....	15143	7964
Ex. E—Royalty payments to and from Hartford..	15144	7964
Ex. F—Stock ownership of H-A. defendants in certain other companies.....	15145	7965
Condensed balance sheets and condensed income account December 1932 to 1935, Jan. 1937 and 1938, and Dec. 1938–1939.....	15146	7966

VOL. XI

EXHIBITS

Stipulations—Continued	Original	Print
Exhibit 973. Hartford—Re Patents	15162	7984
List of unexpired patents owned by H-E	15165	7986
List of Expired Patents formerly owned by Hartford	15209	8017
Infringement Suits	15219	8023
Hartford Interferences	15224	8027
Exhibit 973A. Corrections in Hartford's Stipulation as to Patents	15239	8034
Exhibit 1486. G. C. A. re Exs. 1390–1485, Incl.	15266	8036
Exhibit 1568. Re classification of glass industry	15389	8037
Exhibit 1572. Anchor-Hocking re Balance Sheets 12/31/31 to 4/24/37; Statement of profit and loss and earned surplus 4/1/31 to 4/24/37; Statement of cost of sales by calendar years from 4/4/31 to 4/24/37.	15408	8040
Exhibit 1576. Ball as to Documents with attached papers:	15497	8043
1—List of Patents owned by Ball 10/15/40	15500	8045
2—List of Stockholders	15505	8048
3—Notation of Stockholdings by Ball Bros.' officials in competing glass companies	15507	8050
4—Prices of Mason jars Dec. 1919—12/31/39, incl.	15508	8051
5—Prices on Jellies Dec. 1919–Dec. 31, 1939	15513	8056
6—Jar and Jelly Shipments 1923–1939, incl.	15516	8059
7—Beer Bottle Shipments 1933–1939, incl.	15518	8061
8—Comparative Balance Sheets Dec. 31, 1938 and Dec. 31, 1939	15519	8062
9—Comparative Profit and Loss Statements 1938 and 1939	15520	8063
10—Comparative Balance Sheets Dec. 31, 1923 to 1937, inclusive	15521	8064
11—Comparative Profit and Loss Statements 1923–1937, incl.	15522	8065
12—Net Profit after Federal taxes—calendar years 1923–1939 incl.	15523	8066
Exhibit 1577. Corning Glass Income Statements 1923–1937, incl.	15525	8069
Exhibit 1578. Net Income of Corning and Subsidiary Cos.	15526	8070
Exhibit 1579. Balance Sheets 12/31/38 and 12/31/39—Corning Glass Works	15527	8070A
Exhibit 1580. Empire Machine Co. Balance Sheets 12/31/38 and 12/31/39 and Statement of Profit and Loss 1/1/38–12/31/39	15529	8071
Exhibit 1581. Price History of Ten Selected Pyrex Ovenware Dishes	15532	8072

EXHIBITS—Continued

Stipulations—Continued	Original	Print
Exhibit 1582. List of Corning Stockholders "Approximately 12/31/39 according to Stewart 6/16/41"....	15547	8093
Exhibit 1583. Hartford re Stockholders.....	15569	8095
List of Stockholders as of 12/31/39.....	15571	8096
List of Common Stockholders as of 9/20/38.....	15582	8106
Exhibit 1584. Hartford re Royalties.....	15585	8107
Tables showing royalties paid by each of its licensees to Hartford, in each of the years 1922–1939, incl.....	15588	8108
Exhibit 1585. Hartford re letters between Safford and Kramer and Cox containing data concerning rates of Hartford's royalties (omitted in printing).....	15594	
Letter A.T.S. to Kramer 10/13/38.....	15606	8133
Letter A.T.S. to Cox, 9/13/38.....	15608	8135
Correcting memorandum of letter to Kramer, dated 10/13/38.....	15602	8138
Exhibit 1586. Hartford—that (1) Hartford authorized to do business in a number of States; (2) in 1937 to 1939, incl., Hartford's employees installed, altered, repaired or inspected Hartford machinery in a number of States; (3) Hartford's licensees have manufactured glass containers and other glass products on Hartford machinery in a number of States; (4) Hartford does not own and never has owned any stock in any of the other corporations which are defendants in this suit.....	15693	8139
Exhibit 1587. Liberty re Balance Sheets and Profit and Loss Statements for each of years 1924–1937, incl...	15695	8140
Balance sheet of 12/31/29.....	15707	8142
Exhibit 1590. Lynch—Comparative Statement of Assets and Liabilities 1928–1939, incl.....	15835	8143
Exhibit 1591. Table showing shares of stock in listed corporations owned by Lynch Corp., its officers and directors. (Marked "Lynch Corp. Stipulation Ex. D".).....	15839	8146
Exhibit 1592. "Lynch Corporation Stipulation Exhibit M"—Forming Machine Prices 4/1/37.....	15841	8147
Exhibit 1593. Lynch re Ownership of stock of Lynch Corp.....	15846	8153
Exhibit 1594. Owens—as to statements of Owens Co.	15847	8153
Exhibit 1595. Owens re various products.....	15904	8155
Ex. 1—Schedule of gross milks shipped 1938 and 1939.....	15906	8157
Ex. 2a—Price list dairy containers issued 4/4/38..	15907	8159
Ex. 2b—Price List Dairy containers issued 10/10/39.....	15914	8172
Ex. 3—Schedule of gross brewery ware shipped...	15922	8187
Ex. 4—Prices, etc.....	15923	8187
Ex. 5—Schedule of infringement suits.....	15924	8188
Ex. 6—Owens' stockholdings in other defendant companies.....	15925	8189

EXHIBITS—Continued

Stipulations—Continued	Original	Print
Exhibit 1596. Owens re finances	15928	8194
Consolidated Balance sheets	15930	8197
Exhibit 1597. Owens re Patents	15952	8219
Ex. 1—List of patents owned by Owens on or prior to 12/31/39	15954	8221
Ex. 2—Libbey Glass patents	15979	8235
Ex. 3—List of interferences involving Owens or predecessor companies since 1916	15982	8237
Exhibit 1598. Owens—re Price Lists	15990	8243
11 Price Lists of Owens or its Predecessor—N. N. Ware and Fruit Juice Bottles:		
Effective 2/1/22	15992	8245
Effective 10/2/22	16004	8255
Effective 10/8/23	16016	8265
Effective 11/15/24	16028	8274
Effective 1/25/26	16040	8284
Effective 10/19/26	16052	8294
Effective 1/5/28	16064	8305
Effective 10/25/28	16084	8322
Effective 6/1/30	16104	8342
Effective 4/1/31	16128	8365
Effective 1/16/33	16152	8389
Exhibit 1599. Owens—Owens' or its predecessor's Price Lists from 1922 to 1937 or 1938 for carload buyers for various kinds of bottles	16168	8403
Beverage List Prices 1920 to 1934–5	16170	8404A
Liquor ware price List No. 1	16171	8405
Milk Bottle Price list—Large Buyer Prices	16172	8405
N. N. Catsup price list No. 1 through No. 9	16173	8406A
P. & P. List No. 1–5, incl.	16181	8411
No. 9 and 10	16186	8415
No. 12–15 incl.	16188	8416
Exhibit 1600. G. C. A. re Trade Statistics	16192	8420
Milk Bottle Manufacturers, July 1938—Capacity, Production and shipments	16194	8422A
Production, Shipments—stock on hand—Comparison 1937 and 1938	16195	8422B
Screw and Lug Type Caps—Capacity, production and shipments	16196	8422C
Molded caps other than molded caps for tubes	16197	8422D
Exhibit 1601. Thatcher re Milk Bottle Prices	16198	8423
Price Lists	16200	8424
Exhibit 1602. Thatcher re Milk Bottle Sales	16219	8433
Schedule of milk bottle sales 1918–1937, incl.	16221	8434
Exhibit 1603. Thatcher re finances	16222	8435
Summary Balance Sheets:		
12/31/18	16224	8436
6/30/19	16225	8437
12/31/19	16226	8438
6/30/20	16227	8439

EXHIBITS—Continued

	Original	Print
Stipulations—Continued		
Exhibit 1608—Continued		
12/31/20	6228	8440
6/30/21	16229	8441
12/31/21	16230	8442
6/30/22	16231	8443
12/31/23	16232	8444
12/31/24	16233	8445
12/31/25	16234	8446
12/31/26	16235	8447
12/31/27	16236	8448
12/31/28	16237	8449
12/31/29	16238	8450
12/31/30	16239	8452
12/31/31	16240	8453
12/31/32	16241	8454
Certificate of auditor	16242	8455
12/31/33	16243	8456
Certificate of auditor	16244	8457
12/31/34	16245	8458
Certificate of auditor	16246	8459
12/31/35	16247	8460
Certificate of auditor	16248	8461
Consolidated Balance Sheet as of 12/31/36	16249	8462
Balance Sheet of Dec. 31, 1937	16250	8464
Consolidated balance sheet 6/30/38 with auditor's certificate attached	16251	8469
Profit and Loss statement 12/31/18–12/31/37	16253	8471
Exhibit 1604. Thatcher, re Finances and Stock	16273	8494
Ex. A—Balance sheet 12/31/38	16276	8496
Ex. B—Balance Sheet 12/31/39	16280	8499
Ex. D—Price lists 4/1/38–12/19/39	16283	8501
Milk Bottle sales 1938 and 1939	16285	8502
Ex. E—Shares owned by Thatcher, or its officers and directors on 12/31/37, 12/31/38 and 12/31/39 in other defendant corporations	16286	8502

VOL. XII

EXHIBITS

Exhibit 2032. G. C. A. re MacKay Correspondence	16291	8503
Ackerman to MacKay, 8/24/37	16292	8503
MacKay to Owens, 8/12/37	16293	8504
Martin to MacKay, 8/20/37	16294	8505
Martin to Ackerman, 8/20/37	16295	8505
Ackerman to Martin, 8/25/37	16296	8506
Exhibit H–5002. Hartford re Finances	16297	8506
Hartford Income and Expenses 1912–1922	16300	8507
Trial Balances 1915–1922	16311	8517
Balance Sheets Dec. 1924–1923	16319	8525

EXHIBITS—Continued

	Original	Print
Stipulations—Continued		
Exhibit H-5002. Hartford re Finances—Continued		
Balance Sheets Dec. 1927–1926–1925	16320	8526
Balance Sheets Dec. 1928	16321	8527
Balance Sheets Dec. 1931–1930–1929	16322	8528
Balance Sheets Dec. 1932	16324	8530
Balance Sheets Dec. 1934, 1933, 1932	16325	8531
Balance Sheets Dec. 1937–1936–1935	16326	8532
Balance Sheets 1939–1938	16327	8533
Profit & Loss Dec. 1923	16328	8534
Profit & Loss Dec. 1925–1924	16329	8535
Profit & Loss Dec. 1927–1926	16330	8536
Profit & Loss Dec. 1928	16331	8537
Profit & Loss Dec. 1929	16332	8538
Profit & Loss Dec. 1931–1930	16333	8539
Profit & Loss Dec. 1933–1932	16334	8540
Statement of Income Dec. 31, 1937–1936, 1935, 1935–1934	16335	8541
Statement of Income Dec. 31, 1939–1938	16336	8542
Exhibit GCA-5188. G.C.A., as follows:	16337	8543
Gross of ware shipped in U. S.		
Ex. A—Domestic Fruit Jars 1928–1939	16340	8545
Ex. B—Jelly Glasses 1928–1939	16341	8545
Ex. C—Beer Bottles 1933–1939	16342	8546
Ex. D—Wide Mouth Bottles and Jars and Pressed Food Containers 1926–1939	16343	8546
Ex. E—Milk and Cream Bottles 1926–1939	16344	8546
Ex. F—All Glass Containers 1926–1939	16345	8547
Ex. G-1 to G-10 Incl.—Show number of gross of all glass containers shipped in the U. S. by:		
Owens	16346	8547
H-A	16347	8547
Anchor-Hocking	16348	8548
Ball	16349	8548
Thatcher	16350	8549
Liberty	16351	8549
Obear-Nester	16352	8550
Reed	16353	8550
Kerr	16354	8551
Olean	16355	8551
Explanatory notes on Exs. A to G	16356	8552
Ex. H—Balance Sheets and Statements of Profit and Loss	16358	8553
Ex. I—Mfrs. of glass containers 1928, 1935, 1938, 1939, who were members of G.C.A. and reported its shipments to G.C.A.; members who did not report shipments; mfrs. not members who reported shipments and mfrs. not members who did not report shipments	16412	8564

EXHIBITS—Continued

Stipulations—Continued	Original	Print
Exhibit C-6119. Corning and Empire re cancellation of 1916 and 1922 contracts, and assignment to Corning of 3 Punty patents, etc.	16426	8567
Exhibit H-6152. Stipulation of Facts, as to what Hunter would testify; listing installations, number of employees each year carrying on activities beneficial to licensees, etc.	16430	8571
Exhibit O-6184. Owens as to interferences between Owens and Hartford pending at time of settlement of Owens-Hamilton suit	16459	8595
CONTRACTS:		
Exhibit 1. Hartford-Empire Agreement 6/30/16	16462	8598
Exhibit 19. Hartford-Corning-Empire agreement relating to Patent Rights and Formulas	16477	8606A
Letter A. D. Falck to Hartford 3/28/24	16477	8606A
Agreement	16481	8607
Exhibit 55. General License Owens, Hartford and certain other companies 4/9/24	16507	8629
Agreement		
Sched. A—Owens Contracts	16534	8645
Sched. B—Patents and Appls. owned by Owens, with notes re agreements, licenses, title, etc.	16539	8648
Sched. C—Htfd. contracts, licenses, etc.	16549	8652
Sched. D—Hartford patents and applications.		
Title Page	16553	8655
Patents originating in Hartford	16554	8655
Applns. originating in Hartford	16556	8656
Patents and Applns. acquired by Htfd. from Empire	16559	8657
Patents acquired through Empire from Gen. Elec.	16562	8658
Patents acquired from Howard	16564	8659
Miscellaneous patents and applns. acquired, with explanatory notes	16566	8660
Applns. of United Bottle Mchy. Co	16570	8663
Explanatory and "General" notes	16571	8663
Letter 1/22/35 A.T.S. to Martin of Owens	16572	8664
Exhibit 61. Agreement for Purchase of stock of Howard Automatic Glass Feeder Co	16573	8665
Agreements	16574	8665
Power of Attorney J. C. Sutton to James O. Campbell, to sign agreement for purchase of stock, with notarial acknowledgment	16604	8682A
Sched. A—Standard Form of License contract of Howard Auto. Feeder Co.	16606	8683
Sched. B—Provisions governing the preferred stock of H-E. Co.	16622	8692

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 61. Agreement for Purchase of stock of Howard Automatic Glass Feeder Co.—Continued		
Schedule of Exceptions	16630	8694
Exceptions—Acme Glass	16631	8694
Gayner 9/21/20	16632	8695
Gayner 9/21/20	16635	8699
Gayner 1/23/22	16636	8699
Glenshaw 1/10/20	16637	8700
Hygeia 9/14/20	16642	8704
Marsden 6/15/22	16644	8705
Maryland 3/1/21	16647	8706
North Wheeling 2/17/21	16648	8707
Pacific Coast 5/10/22	16649	8707
Pierce Glass 8/3/20	16650	8708
Turner Bros. 8/16/20	16652	8709
West Ham Bottle (England)	16654	8710
Flaccus	16659	8714
Exhibit 62. Assignment of Howard patents and patent rights to Hartford, 2/21/23	16660	8714
Exhibit 63. General Assignment and Power Howard Co. to Hartford, 5/1/26	16662	8715
Exhibit 81. License Miller Co. to Hartford under patent 1,260,428	16666	8716
Exhibit 82. Sale of Patent rights W. J. Miller to Hartford 7/30/25	16668	8717
Sched. A—List of patents and applications	16671	8720A
Exhibit 83. Assignment of Appln. S. N. 641,050—W. J. Miller and Lawrence to Hartford, 7/30/25	16672	8720B
Exhibit 84. Release by W. J. Miller to Hartford 7/30/25	16674	8721
Exhibit 85. Note re	16675	8721
Exhibit 86. Limitations of Recovery—Miller, Hartford and Owens—July 1925	16676	8721
Exhibit 87. Sale of Former patent rights W. J. Miller to Victor Greene, 7/30/25	16678	8723
Exhibit 88. Bill of Sale W. J. Miller to V. Greene (other than patents and patent rights), 7/30/25	16686	8725
Exhibit 89. Assumption of Notes—V. Greene and H. E. 7/30/25	16690	8726
Exhibit 90. License 8/14/25—T. R. & B. to Owens	16691	8727
Exhibit 91. Note re	16697	8728
Exhibit 92. Release Owens and Hartford to T. R. & B. 8/14/25	16705	8728
Exhibit 93. Release T. R. & B. to Owens, 8/14/25	16707	8729
Exhibit 94. Note re	16709	8731
Exhibit 95. Waiver and Agreement—Owens and Hartford to Federal, 8/14/25	16715	8731
Sched. A—Special Glasses and/or wares—bulbs, tubing, etc	16720	8733

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 96. Indemnity Agreement Owens and Hartford to T.R.&B. 8/14/25	16722	8734
Exhibit 97. Assignment of Licenses—T.R.&B. to C.B.B. 8/14/25	16727	8736
Exhibit 98. Loan and Security therefor—Hartford and Owens 8/14/25 re purchase of T.R.&B.	16735	8738
Exhibit 99. Option C.B.B. to Feeder Patents Co. 8/14/25	16738	8739
Exhibit 100. Agreement as to Current License Fees C.B.B. and T.R.&B., 8/14/25	16746	8744
Exhibit 101. Agreement—Division of Capstan Royalties and fixing Federal Royalties—Federal and C.B.B., 8/14/25	16749	8745
Exhibit 102. Agreement re T.&R. machines for foreign use—Owens and Hartford, 8/14/25	16755	8749
Exhibit 103. Agreement between Hartford and Owens re assignment of royalties from five licensees, etc., 8/14/25	16759	8750
Exhibit 105. Agreement between C.B.B., Feeder Patents Co., Hartford and Owens, 12/31/25. Feeder Patents exercises option to take T.R.&B. licenses from C.B.B., etc.	16767	8753
Exhibit 106. Assignment C.B.B. to Feeder Patents Co. of T.R.&B. licenses, 12/31/25	16772	8755
Exhibit 107. Assignment Feeder Patents Co. to Hartford of T.R.&B. licenses, 12/31/25	16774	8756
Exhibit 108. Agreement 2/9/25—Owens and Hartford-Empire, Hartford-Fairmont—amending agreement of 4/9/24	16775	8756
Exhibit 112. Agreement of sale of patent rights between Rankin Automatic Feeder Co. and Hartford, 10/18/28	16786	8758
Schedule A.—List of U. S. Patents and Applns. of Rankin	16790	8761
Exhibit 113. Assignment—Rankin Feeder Co. to Hartford, 11/9/28	16792	8761
Exhibit 142. General License Agreement between Hartford and H-A. 7/1/32	16800	8764
Index	16802	8764
Agreement	16804	8765
Sched. A	16819	8776
Sched. B	16822	8778
Sched. C	16823	8779
Sched. D	16825	8780
Exhibit 143. Supplemental Agreement Hartford and H-A., 7/1/32	16830	8780
Exhibit 144. Agreement for Cancellation and Reinstatement of Contracts and for Division of Income from T.R.&B's. Licensees, between Owens and Hartford, 7/1/32	16844	8788

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 145. General License Agreement—Hartford and Owens, 7/1/32	16856	8787
Sched. A—Exclusions of Htfd	16870	8798
Sched. B—Form of individual machine license	16873	8801
Sched. C—Schedule of lowest rates	16874	8801
Sched. D—Exclusions of Owens	16877	8803
Exhibit 146. Supplemental Agreement between Hartford and Owens 7/1/32 re royalties if Owens deprived of 1/3 of Hartford income prior to 1/3/45	16881	8803
Exhibit 147. Suction Inventions License Agreement—Owens and Hartford, 7/1/32	16884	8805
Index	16886	8805
Agreement	16888	8806
Sched. B—Outstanding licenses of Hartford	16895	8811
Exhibit 148. General License Agreement—Owens and H–A., 7/1/32	16904	8813
Exhibit 149. Supplemental License Agreement—Owens and H–A., 7/1/32	16921	8821
Exhibit 151. General Agreement—Hartford and Knox Glass Bottle and others, 8/25/32	16929	8827
Schedule A—Description of leased machinery	16955	8834
Schedule B—Permitted ware and Exclusions	16956	8835
Schedule C—Rates of Royalty	16959	8836
Schedule D—List of Patents	16960	8837
Bill of Sale	16962	8837
Schedule A—List of Feeders	16964	8838
Exhibit 152. General Agreement—Hartford and Lamb Glass Co.—11/10/32	16985	8839
Schedule A—Machines covered	17008	8851
Schedule B—Installation of Feeders	17010	8852
Schedule C—Glassware which may be made	17011	8853
Schedule D—Rates of Royalty	17014	8854
Schedule E—List of U. S. Patents	17016	8855
Bill of Sale	17018	8855
Exhibit 153. Settlement for Damages—Hartford and Lamb 11/10/32	17025	8856
Exhibit 154. General Agreement Hartford and Universal Products Co.—9/15/32	17035	8858
Bill of Sale (omitted in printing)	17055	
Sched. A—List of feeders	17056	8859
Sched. A—Description of Machinery included in Agreement	17057	8860
Exhibit 156. Settlement Agreement—Hartford and Maywood, 12/16/32	17063	8860
Bill of Sale	17067	8862
Exhibit 157. License and Lease No. BF–9—Hartford to Maywood, 12/16/32	17068	8863
Sched. A—Description of leased machinery	17087	8863
Exhibit 158. Settlement Agreement 12/7/32—Hartford and Latchford	17095	8863
Bill of Sale	17098	8864

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 159. General Agreement Hartford and Latchford, 12/7/32	17099	8865
Sched. A—Machines covered	17122	8865
Exhibit 161. General Feeder Agreement—1/23/33	17139	8865
Sched. A—Machines covered by agreement	17163	8866
Exhibit 163. Letter 3/7/33 F. G. S. to H–A., authorizing manufacture of milk bottles at H–A. plant in Oakland, Cal.	17172	8866
Exhibit 170. Agreement Amending Supplemental Agreement of 7/1/32—H–E. and H–A., dated 8/29/33	17175	8867
Exhibit 195. License Agreement between Owens Bottle Co., Licensor; Toledo Glass, Owner, Charles Boldt Co. and Ball Bros., Licensee, 11/2/24	17179	8869
Exhibit 196. Agreement, Knox and Associated Cos. and Ball Bros., 3/23/33, re Molds and Mold Equipment, etc.	17211	8871
Exhibit 198. Cancellation of Domestic Fruit Jar Rights—Hartford and General Glass	17221	8876
Exhibit 199. General Feeder License Agreement—Hartford and Ball, 3/25/33	17228	8877
Sched. B—List of Ball patents	17259	8894
Sched. C—Outstanding licensees of Hartford for fruit jars	17261	8895
Sched. D—Glassware to be made	17264	8897
Sched. E—Rates of Royalty	17268	8900
Sched. F—Installation of Hartford feeders	17270	8901
Exhibit 200. Agreement 4/27/33—Brockway, R. L. Warren and Ball Bros., re fruit jars	17272	8901
Exhibit 231. General Agreement 12/8/20—Hartford and Thatcher	17287	8907
Exhibit 234. Supplemental Agreement—Single Feeders—Production Rebate—Future Development—Hartford and Thatcher 12/1/25	17317	8926
Exhibit 237. Production Refund Agreement—Single Feeders—Hartford and Thatcher, 10/18/26	17323	8929
Exhibit 240. Consolidated Agreement—Thatcher and Hartford, 4/13/28	17333	8931
Exhibit 242. Agreement 12/5/32—Thatcher, Knox and Underwood, re transfer of milk bottle rights from Knox to Thatcher	17361	8950
Exhibit 243. Revocation of Milk Bottle Rights—Hartford and Knox, 12/6/32	17368	8954
Exhibit 248. General Agreement—Thatcher and Hartford, 1/1/36	17374	8956
Exhibit 263. Agreement O'Neill Machine Co. et al. and Owens, March 1933	17405	8972
Letter 4/4/33—Owens to O'Neill et al., exercising option	17406	8973
Option Agreement	17407	8973
Letter 3/28/33—C.B.B. to Levis	17456	8975

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 263. Agreement O'Neill Machine Co. et al. and Owens, March 1933—Continued		
Letter 3/27/33—W.J.B. to Levis	17461	8980
Letter 3/27/33—W.J.B. to Owens re infringement	17464	8982
Exhibit 264. Agreement 5/6/33—O'Neill Machine Co. et al. and Owens	17472	8983
Exhibit 265. Assignment from Frank O'Neill to Hartford, 5/5/33	17502	8995
Letter 5/3/33—Frank O'Neill to Hartford—proposal to sell patents and applications, etc	17503	8995
Ex. A—Assignment of Patents and Applications, 5/19/33	17507	8997
Ex. B—License under certain patents and applications, 5/19/33—Frank O'Neill to Hartford	17509	8999
Letter 6/30/33—O'Neill to Hartford	17512	9000
Exhibit 266. Agreement relating to Knox-O'Neill Suction machines—Hartford and Knox and affiliated companies—9/1/36	17516	9001
Exhibit 287. Agreement 9/30/31—Nivison-Weiskopf and General Glass Co	17557	9006
Sched. A—Copy of minutes of special meeting of Board of Directors 9/30/31	17561	9009
Do., Stockholders, 9/30/31	17562	9010
Assignment General Glass to Hartford 10/5/32	17563	9011
Notice of Sale by N-W. to General Glass of certain machines, etc	17564	9012
Exhibit 288. Nivison-Weiskopf Settlement Agreement—Hartford and General Glass Co., 9/16/32	17565	9013
Exhibit 302. Forming Machine Agreement—Whitall-Tatum and Hartford, 2/9/25	17570	9015
Exhibit 303. Agreement relating to Whitall-Tatum Agreement—Owens, H-E. and H-F., dated 2/9/25	17601	9032
Exhibit 305. Forming Machine Agreement—Whitall-Tatum and Hartford, 6/1/29	17608	9035
Exhibit 306. Agreement relating to Whitall-Tatum Agreement—Owens and Hartford, 6/1/29	17640	9051
Exhibit 307. Assignment by Trustees for United Bottle Machinery to Hartford, 2/16/25	17648	9056
Exhibit 327. Agreement—Ed. Miller and Lynch, 8/21/33	17651	9059
Exhibit 328. License Agreement—Owens and Lynch—8/23/33	17659	9063
Exhibit 329. Feeder License 8/23/33—Lynch to Hartford	17665	9065
Exhibit 330. Agreement 8/23/33 between Hartford and Lynch	17667	9067
Exhibit 330A. Schedule A attached to 8/23/33 Lynch-Hartford Agreement. List of patents on Hartford's Licensed Forming Machine Inventions	17678	9075

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 330b. Schedules B and C attached to 8/23/33 Lynch-Hartford Agreement. List of patents on Lynch's forming machine inventions	17690	9082
Exhibit 336. Agreement 9/19/33—Whitall-Tatum and Hartford	17698	9083
Exhibit 337. Agreement 9/26/33 relating to W-T. forming machine rights, between Hartford and Owens.	17702	9087
Assignment 9/19/33—W-T. to Hartford of 2 patents and H. & T. applications	17713	9089
Exhibit 340. Amended Agreement between Hartford and Lynch, 8/23/33	17720	9091
Exhibit 352. Letter F. G. S. to Corning, 10/3/37, re licensing licensees to make lenses	17724	9094
Exhibit 364. Letter A. T. S. to Corning, 5/3/34, re licensing Fairmount to make optical ware	17725	9095
Exhibit 379. License and Release Agreement—Hartford and Corning, 6/26/28	17728	9096
Sched. A—U. S. and Canadian patents and applications	17733	9098
Exhibit 381. Special Agreement amending glass contract, Corning and Hartford, 1/23/30	17735	9099
Exhibit 411. Agreement Amending Sec. 22 of Owens-Hartford General License Agreement, 2/2/31	17741	9102
Exhibit 475. Letter 4/13/34—A. T. S. to Capstan, setting out points of agreement between Capstan and Hartford	17743	9102A
Exhibit 565. Kucera Feeder Agreement with Hartford, 8/25/32	17746	9103
Exhibit 566. Assignment, Kucera to Hartford, 8/26/32.	17757	9108
Exhibit 568. General License Owens and Owens-Illinois Pacific to H-E., 9/30/35	17758	9109
Sched. A—Exclusions of Owens	17763	9113
Exhibit 569. General License from Hartford to Owens, 10/1/35	17764	9113
Sched. A—Glassware excluded in determing Hartford's lowest rates	17772	9119
Sched. B—Exclusions of Hartford	17774	9120
Sched. C—Rates of royalty	17777	9123
Exhibit 570. Amendment to General License from Hartford to Owens, 1/1/36	17779	9124
Exhibit 571. Suction Inventions License Agreement, Hartford and Owens, 10/1/35	17781	9125
Schedule A—Exclusions of Hartford	17784	9127
Exhibit 572. License Agreement between Owens and H-A., 10/3/35	17789	9128
Sched. A—Exclusions	17804	9139
Sched. B—Rates of Royalty	17807	9141
Exhibit 572a. Schedule C of Owens—H-A. contract 10/3/35 re H-A. feeders and formers	17809	9141
Description and index of formers and feeders	17810	9142

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 572a. Schedule C of Owens—H–A. contract 10/3/35 re H–A. feeders and formers—Continued		
Index to Photographs	17818	9145
Photographs	17819	9146
Exhibit 573. Second Amendment to Supplement Agreement 9/29/35, between Hartford and H–A	17854	9181

VOL. XIII

EXHIBITS

Exhibit 578. Consolidated Feeder and Former License and Lease, 10/1/35—Owens and Hartford	17860	9187
Form of License and Lease No. HSF-, including Schedules A, B and C	17865	9190
Sched. D—Rates of Royalty	17883	9204
Exhibit 579. Consolidated Stacker and Conveyor Agreement, 10/1/35, between Hartford and Owens	17889	9206
Schedule A—Form of Hartford Lehr Stacker license, including Schedules A, B and C	17893	9208
Exhibit 580. Consolidated Lehr Agreement 10/1/35 between Hartford and Owens	17905	9213
Acceptance by Owens-Illinois Pacific Coast Co.	17912	9218
Sched. A—Description of Lehrs covered by agreement	17913	9218
Sched. B—Form of Hartford Lehr License with Schedules A, B and C	17913	9218
Exhibit 581. Agreement—Owens and Hartford—re Libbey Glass Mfg. Co's. patents, 10/2/35	17933	9232
Sched. A—List of Burn-off patents	17938	9235
Exhibit 598. Cancellation Agreement between Kucera and Knox-O'Neill Co. and others, 8/25/32	17940	9236
Exhibit 599. Letter—A. T. S. to Knox, 8/25/32, re agreement regarding use of feeders licensed	17944	9238
Exhibit 739. License and Lease No. HL–145—Hartford to Swindell, 9/29/30	17950	9239
Sched. C—Glassware which may be annealed	17970	9244
Exhibit 740. Note re	17972	9244
Exhibit 789. License and lease Agreement—Hartford to Knape-Coleman, 4/29/35	18002	9245
Sched. A—Permitted Ware	18007	9247
Sched. B—Rates of Royalty	18009	9248
Exhibit 790. Bill of Sale—Knape-Coleman to Hartford (Miller and Bethel Feeders) 4/29/35	18012	9248
Exhibit 804. Letter A. T. S. to Capstan, 6/9/33	18014	9250A
Exhibit 805. Do. Do. 10/12/33	18015	9250B
Exhibit 806. Agreement relating to Capstan Feeders—Hartford and Capstan, 5/1/34	18018	9251
Sched. A	18022	9253

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 808. General Agreement Capstan and Hartford, 2/17/26 (effective Oct. 3, 1925)	18024	9253
Sched. A—Description of T. & R. feeder	18054	9270
Sched. B—Installation of machinery	18055	9271
Sched. C—Glassware which may be made	18056	9271
Sched. D—Royalty rates	18059	9273
Exhibit 878. Agreement 1/15/35—Owens and Soubier	18066	9276
Exhibit 909. Note re	18068	9278
Exhibit 932. Agreement 8/11/1932—Retainer of Wm. P. Clarke by H-E	18075	9278
Exhibit 936. Agreement 3/28/28—Brockway, Kearns-Gorsuch and H-A., re settlement of K-G. suit	18076	9279
Exhibit 963. Option Ed. Miller to Williams Hatch & Co., for sale of Ed. Miller property, patents, etc., 4/14/33, with receipt dated 7/21/33 by Ed. Miller, acknowledging payment of $5,000. by Collin	18078	9280
Exhibit 970. Note re	18082	9284
Exhibit 985. Agreement 8/10/31—Kucera and Knox-O'Neill	18117	9284
Exhibit 986. Agreement 8/11/31—Kucera and McKee	18124	9291
Exhibit 987. Letter 4/26/32—Knox-O'Neill to Kucera, exercising option	18129	9295
Exhibit 1000. License Agreement 5/20/21—H-A. & Owens re Brookfield	18131	9297
Exhibit 1023. Letter Agreement Amsler-Morton and Lynch—3/22/33, accepted by The Container Service Corp	18135	9299
Exhibit 1140. Agreement—Thatcher, Hocking and Hartford, 2/11/1931, re formation of new company	18141	9303
Exhibit 1209. Letter 7/1/38—A. T. S. to Ball Bros. re Licensing of feeders at Three Rivers	18151	9306
Exhibit 1282. Letter 2/25/35—A. T. S. to Owens, re Hemingray	18153	9307
Exhibit 1284. Second Supplemental Agreement 8/24/33—Owens and H-A	18155	9308
Exhibit 1285. Agreement 5/1/33—Owens and H-A. re O'Neill patents and inventions	18160	9309
Exhibit 1365. Agreement of sale and release between Brockway and Hartford, 9/12/34	18162	9311
Exhibit 1489. Settlement Agreement 12/16/32—Hartford and McLaughlin	18165	9312
Exhibit 1536. Letter—Owens and Libbey to Corning, re license on burn-off patents	18169	9314
Exhibit 1541. Letter—Corning to Hartford, 12/1/38, re granting to Lynch a non-exclusive license	18170	9316A
Exhibit 1605. License and Lease HSF-324—Hartford to Hocking	18171	9317
Memo—A. T. S. to T. L. C. 11/2/37	18172	9317
Letter 5/26/37—A. T. S. to Hocking	18173	9318

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 1605. License and Lease HSF-324—Hartford to Hocking—Continued		
Letter 5/8/36—A. T. S. to Hocking	18179	9323
Sched. C—Glassware which may be made	18201	9324
Exhibit 1606. Consolidated Feeder Agreement—Hartford and General Glass Corp., 9/16/32	18207	9326A
Letter 10/31/33—A. T. S. to General	18208	9326B
Letter 9/16/32—F. G. S. to General	18210	9326D
Agreement	18211	9327
Sched. C—Specification of glassware to be made	18237	9332
Exhibit 1607. License and Lease HSF-347—Hartford to Salem, 1/25/37	18243	9334
Sched. C—Specification of ware to be made	18270	9334
Exhibit 1608. License 11/30/34 between Hartford and American Thermos Bottle re license under two Empire patents	18274	9336
License Agreement 12/23/20 between Empire and American Thermos	18275	9337
Exhibit 1611. License and Lease HSF-436—Hartford to Armstrong Cork, 8/15/40	18285	9344
Exhibit 1612. License and Lease HSF-82—Hartford to Buck Glass Co., 1/11/26.....(omitted in printing)..	18318(a)	
Letter 6/12/33—A. T. Safford to Buck	18319	9344
Exhibit 1613. License and Lease HSF-23—Hartford to Carr-Lowrey, 10/30/24	18375	9346
Sched. C—Specification of ware to be made	18398	9347
Exhibit 1614. License and Lease HSF-10—Hartford to Chattanooga Bottle & Glass Mfg. Co., 8/21/23	18417	9348
Exhibit 1615. Sale of Paddle-Needle and Single feeders—Hartford and Corning, 6/10/24	8443	9349
Exhibit 1616. Lease Agreement—Hartford and Corning, 1/26/38	18445	9350
Exhibit 1617. General Agreement—Hartford and Diamond—3/27/33—Also Settlement Agreement, Bill of Sale	18454	9355
Sched. A—Machines covered by agreement	18477	9355
Settlement Agreement	18486	9355
Bill of Sale	18489	9357
Exhibit 1618. Agreements between Hartford and Fairmont Glass Works	18495	9358
Settlement agreement	18495	9358
General agreement	18498	9359
Bill of sale	18539	9359
Exhibit 1619. License and lease HSF-437—Hartford to Federal Glass Co., 8/16/40	18559	9360
Exhibit 1620. License and lease MF-26, Hartford to Florida, 8/2/35	18587	9360
Letter 3/31/37—A. T. Safford to Florida	18588	9361
Sched. A—Description of machinery licensed	18612	9362

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 1620. License and lease MF-26, Hartford to Florida, 8/2/35—Continued		
Sched. C—Specification of ware which may be made	18614	9362
Exhibit 1621. License and lease HSF-56—Hartford to Foster-Forbes, 6/4/25	18632	9363
Exhibit 1622. License and Lease HSF-318—Hartford to Gayner, 12/31/35	18661	9363
Sched. C—Permitted Ware and Exclusions	18682	9364
Letter 8/25/31—H. K. Smith to Long Beach Glass.	18700	9366
Exhibit 1623. License and Lease HSF-180—Hartford and Long Beach Glass Co., 7/27/29	18702	9367
License, sec. 15	18712	9367
Exhibit 1624. License and Lease HSF-339—Hartford to Glenshaw, 19/8/36	18726	9368
Index	18727	9368
License	18728	9369
Schedule A—Machinery and Accessories furnished	18745	9381
Sched. B—Installation of Machinery	18746	9382
Sched. C—Permitted Ware and Exclusions	18748	9383
Sched. D—Rates of royalty	18751	9385
Sched. E—List of patents	18752	9386
Exhibit 1625. License and Lease HSF-4—Hartford to J. T. & A. Hamilton, 4/16/23	18773	9386
Sched. A—Machinery and accessories furnished	18794	9400
Sched. B—Installation of machinery	18795	9401
Sched. C—Permitted ware and exclusions	18796	9402
Sched. D—Rates of royalty	18798	9403
Exhibit 1626. License and Lease HSF-151—Hartford to Indiana Glass, 10/6/27	18813	9404
Exhibit 1627—License and Lease HSF-411—Hartford to Laurens, 11/2/39	18839	9404
Exhibit 1628. License and Lease HSF-42—Hartford to Maryland, 4/15/25	18867	9404
Exhibit 1629. License and Lease HSF-162—Hartford to McKee, 7/18/28	18941	9405
Exhibit 1630. General Agreement—Hartford and Northwestern Glass., 8/1/33; also Settlement Agreement, Bill of Sale	18979	9405
Agreement	18979	9405
Sched. A—Machines and accessories covered	19002	9405
Settlement Agreement	19012	9406
Bill of Sale	19016	9408
Exhibit 1631. License and Lease HSF-386—Hartford to Libbey Glass., 2/25/38	19018	9408
Letter 3/18/38—A. T. S. to Libbey	19019	9408A
License	19020	9409
Sched. A—Machinery and accessories furnished	19039	9422

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit 1631. License and Lease HSF-386—Hartford to Libbey Glass., 2/25/38—Continued		
Sched. B—Installation of machinery	19040	9423
Sched. C—Permitted ware and exclusions	19041	9423
Sched. D—Rates of royalty	19044	9425
Exhibit 1632. License and Lease MF-9—Hartford to Liberty Glass, 5/25/26	19056	9426
Exhibit 1633. License and Lease HSF-188—Hartford to Olean, 9/6/29	19091	9426
Exhibit 1634. Special Agreement—Renewal of Howard Licenses—Substitution of Hartford Single Feeders—Hartford and Pierce Glass Co., 7/14/37	19116	9426
Renewal	19116	9426
Correspondence		
7/31/36—A. T. S. to Pierce	19117	9426
6/19/36— Do.	19119	9427
Agreement	19122	9429
License	19127	9431
Sched. A—Machinery and Accessories furnished	19148	9443
Sched. B—Marked "Omitted—machinery already installed"	19149	9444
Sched. C—Permitted ware and Exclusions	19150	9444
Sched. D—Rates of royalty	19152	9446
Renewal License and Lease 6/15/25	19153	9446
Exhibit 1635. General Agreement Hartford and Sterling Glass Co., 7/7/33	19161	9446
Sched. A—Machines and accessories furnished	19183	9447
Settlement Agreement	19192	9447
Bill of Sale	19196	9449
Exhibit 1636. Agreements between Hartford and Tygart Valley, 2/18/36	19199	9450
Settlement Agreement	19199	9450
Sched. A—List of Tygart's patents transferred to Hartford	19203	9450
General Agreement	19204	9450
Sched. A—Machines and Accessories furnished	19228	9451
Exhibit 1637. License and Lease HSF-393—Hartford to Wheaton, 12/13/38	19252	9452
Exhibit 1638. Form of Hartford-Fairmont License and Lease No. 250—in blank	19289	9452
Exhibit 1669. License Agreement—Corning and McKee, 7/20/21	19337	9469
Ex. I	19349	9477
Sched. A	19350	9478
Sched. B—Heat Resistance Ware	19352	9478
Sched. C—Minimum Net Selling Prices	19354	9479
Sched. C (1)—p. 1	19362	9485
Letter 11/10/20—Corning to McKee	19363a	9486A
Sched. C—p. 2	19364	9487

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 1670. Agreement—Corning and McKee, 6/17/30	19365	9487
Exhibit 1671. Agreement—Corning and McKee 8/3/31.	19374	9493
Exhibit 1672. Agreement Corning and McKee, 12/18/31	19380	9495
Exhibit 1673. Agreement—Corning and McKee, 5/29/33	19386	9496
Exhibit 1685. Agreement, Owens, Owens-Illinois Pacific and Libbey with Hartford, re Lehrs, 10/25/39	19398	9497
Exhibit 1686. Agreement—James W. Hamilton et al. and Thatcher, 8/29/19	19407	9499
Exhibit 1687. Apportionment of General's Rights in event of dissolution—6/26/33—Hartford, Hocking, Thatcher and General Glass	19410	9501
Sched. A—List of Licenses, etc	19414	9504
Exhibit 1688. Memorandum of Agreement 3/17/36—Owens and Rawleigh Co	19415	9504
Exhibit 1689. Settlement Agreement—Hartford, Illinois Pacific Glass Corp. and Illinois Pacific Coast Co., 10/18/30	19416	9505
Sched. A—Description of Illinois-Pacific feeders	19421	9508
Exhibit 1743. Amendment to General License Agreement—Hartford and Owens, January 1933	19422	9509A
Exhibit 1744. Amendment to General License Agreement—Hartford and Owens—February, 1933	19425	9509D
Exhibit 1765. Letter 10/11/32—F. G. Smith to Owens re Root Glass Co	19427	9509F
Exhibit 1766. Letter 10/11/32—F. G. S. to Root Glass.	19428	9509G
Exhibit 1767. Letter 12/29/32—A. T. S. to General Glass	19429	9509H
Exhibit 1769. Letter 7/27/33—A. T. S. to Hazel-Atlas.	19430	9509J
Exhibit 1814. Letter 10/11/33—A. T. S. to Knox	19432	9509L
Exhibit 1815. Letter 1/16/37—A. T. S. to Knox	19434	9509N
Exhibit 1817. Letter 11/7/33—A. T. S. to Universal Glass Products	19436	9509Q
Exhibit 1821. Letter 3/9/39—A. T. S. to Knox	19437	9509R
Exhibit 1822. Letter 3/9/39—A. T. S. to Knox	19439	9509T
Exhibit 1829. License and Lease HSF-274—Hartford to Akro Agate, 6/6/34	19451	9510
Exhibit 1850. Agreement 3/5/34—General Glass and Thatcher	19477	9510
Exhibit 1858. Amendment to License and Release Agreement — Hartford and Corning — re Danner machine—6/26/28	19479	9511
Exhibit 1865. Option—Hitchcock to Hartford 8/5/16	19481	9512A
Exhibit 1866. Assignment—Hitchcock et al. to Hartford—2/27/18	19483	9512B
Exhibit 1867. Agreement—Hitchcock et al. and Hartford	19488	9513

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit 2002. License and Lease HSF-378—Hartford to Pittsburgh-Corning, 9/28/37	19493	9515
Exhibit 2003. License and Lease HSF-414—Hartford to Kimble, 9/14/39	19520	9515
Exhibit 2004. License of Pratt-Rankin patent rights—Hartford to Owens, 2/16/29	19549	9515
Exhibit H-5012. License and Lease HSF-174—Hartford to Macbeth-Evans, 6/29/29 (omitted in printing)	19556	
Sched. C—Permitted ware and exclusions	19575	9517
Exhibit H-5013. Letter 11/21/32—Hartford to Macbeth-Evans	19578	9519
Exhibit H-5015. License and Lease HSF-226—Hartford to Bartlett-Collins, 12/14/31 (omitted in printing)	19583	
Sched. C—Permitted ware and exclusions	19604	9525
Exhibit H-5016. Letter 11/23/39—A. T. S. to Bartlett-Collins	19609	9526A
Exhibit H-5024. Letter 5/10/37—A. T. S. to Ball Bros.	19611	9526C
Exhibit H-5026. Agreement amending General Feeder License Agreement—Hartford and Ball—8/1/40	19614	9527
Exhibit H-5027. Agreement between Hartford and Lynch 9/18/40	19626	9532
Sched. A—List of Hartford patents	19637	9537
Sched. B—List of Lynch patents	19646	9538
Sched. C—List of Hartford's plunger settle patents	19647	9538
Exhibit H-5028. Amended Feeder License—Lynch to Hartford, 9/18/40	19649	9538
Exhibit H-5029. Assignment—Hartford to Corning, 9/23/40	19652	9539
Exhibit H-5030. Agreement—Hartford, Corning and Empire, 9/23/40	19655	9540
Exhibit H-5031. Modification Agreement—Hartford and Corning, 12/1/40	19658	9542
Exhibit H-5032. License Agreement and Release of Exclusive rights—Hartford and American Thermos, 3/11/41	19660	9544
Sched. A—Royalty rates	19665	9547
Exhibit H-5033. Supplemental Agreement—Hartford and Federal Glass Co., 3/4/41	19667	9547
Exhibit H-5034. Supplemental Agreement—Hartford and Maryland Glass Co., 3/3/41	19675	9549
Sched. A—Contracts	19681	9552
Sched B—Rates of royalty	19683	9553
Exhibit B-5035. Letter 10/16/40, F. C. Ball to Knox	19684	9554A
Exhibit LC-5096. Supplemental Agreement—Hartford and Lynch, 8/23/33	19685	9555

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit LC-5096a. Continuation of Rights to Lynch by Owens until 1/1/51, under certain provisions, dated 8/23/33	19689	9557
Exhibit LC-5096B. Supplemental Agreement between Owens and Lynch, 2/16/40	19694	9558
Exhibit LC-5097. Additional Agreement between Hartford and Lynch, 8/23/33	19695	9559
Exhibit LC-5098. Supplemental Agreement between Hartford and Lynch, 2/2/34	19698	9561
Exhibit LC-5099. Agreement between Owens and Lynch, 2/28/38	19701	9563
Exhibit H-5100. Form of Lynch's Order blank	19703	9564
Exhibit LC-5115. Form of order to Lynch Corp	19704	9568
Exhibit AH-5120. Protective Agreement of Common Stockholders of Turner Glass Corp	19705	9569
Exhibit AH-5121. Lease—12/10/31—Monongah and General Glass	19718	9570
Exhibit H-5196. License BF-1—Hartford to Swindell, 7/28/27	19772	9574
Exhibit O-5209. License and Agreement—Toledo Glass Co. and Owens Bottle Co., 10/16/03	19790	9574
Exhibit O-5210. License Agreement—Owens Bottle Machinery, Toledo Glass and Greenfield Fruit Jar and Bottle Co., Licensee	19798	9579
Exhibit O-5211. Agreement—Owens, Toledo Glass and Baldwin Travis, 9/16/04	19815	9591
Exhibit O-5212. Agreement, Owens, Toledo and Thatcher, 5/28/08	19842	9608
Exhibit O-5213. Letter—Greenfield Fruit Jar and Bottle Co. and Ball Bros. to Owens and Toledo Glass, 1/23/15	19848	9611
Exhibit O-5214. License Agreement—Toledo and Owens Bottle Machine Co., 7/2/17	19850	9612
Exhibit O-5215. Agreement, 7/22/30—Owens and Thatcher	19859	9617
Exhibit H-5321. Nagle Lehr Agreement—Hartford and Thatcher, 12/6/37	19863	9619
Exhibit H-5335. Sales Agreement—Mallinger and Hartford, 2/7/35	19875	9623
Exhibit H-5395. License from Empire Machine to Corning, 6/8/22	19881	9626
Exhibit H-5444. Supplemental Agreement—Hartford and Diamond, 2/28/41	19894	9631
Exhibit H-5504. Assignment of applications and inventions—T. R. & B. to Hartford, 8/14/25	19900	9632
Exhibit H-5751. Former License No. 1—Hartford and Marienville Glass, 10/31/33	19912	9636A
Sched. A—List of patents and applications	19914	9637
Sched. B—Permitted ware and exclusions	19915	9637
Sched. C—Rates of royalty	19917	9639

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit H-5752. Form letter, dated 10/2/41—re licensing policy	19922	9639
Exhibit H-5754. Supplemental Agreement—Hartford and Akro Agate Co., 3/31/41	19924	9640
Exhibit H-5755. Do., Hartford and Armstrong Cork Co., 3/25/41	19932	9640
Exhibit H-5756. Do., Hartford and Bartlett-Collins, 3/5/41	19941	9641
Exhibit H-5757. Do., Hartford and Brockway, 3/15/41	19950	9641
Exhibit H-5758. Supplemental Agreement, Hartford and Carr-Lowrey, 2/28/41	19957	9641
Exhibit H-5759. Do., Hartford and Chattanooga, 3/7/41	19967	9641
Exhibit H-5761. Do., Hartford and Fairmount, 3/17/41	19975	9642
Exhibit H-5762. Do., Hartford and Florida, 3/1/41	19983	9642
Exhibit H-5763. Do., Hartford and Foster-Forbes, 2/27/41	19990	9642
Exhibit H-5764. Do., Hartford and Gayner, 4/7/41	19997	9642
Exhibit H-5765. Do., Hartford and Glass Containers, 3/13/41	20004	9643
Exhibit H-5766. Supplemental Agreement, Hartford and J. T. & A. Hamilton, 2/27/41	20011	9643
Exhibit H-5767. Do., Hartford and Indiana, 4/29/41	20020	9643
Exhibit H-5768. Do., Hartford and Kimble, 2/28/41	20036	9643
Exhibit H-5769. Do., Hartford and Knox, 3/10/41	20036	9644
Exhibit H-5770. Do., Hartford and Laurens 4/4/41	20046	9644
Exhibit H-5771. Do., Hartford and Libbey, 3/25/41	20054	9644
Exhibit H-5772. Do., Hartford and Liberty, 3/17/41	20063	9644
Exhibit H-5773. Supplemental Agreement, Hartford and Maywood, 3/6/41	20072	9645
Exhibit H-5774. Do., Hartford and Northwestern Glass Co., 3/21/41	20081	9645
Exhibit H-5775. Do., Hartford and Pierce Glass Co., 4/2/41	20089	9645
Exhibit H-5776. Do., Hartford and Pittsburgh-Corning, 3/3/41	20097	9645
Exhibit H-5777. Do., Hartford and Warfield (Sterling Glass Div.), 4/19/41	20105	9646
Exhibit H-5778. Do., Hartford and Swindell, 3/18/41	20114	9646
Exhibit H-5779. Do., Hartford and Universal, 4/4/41	20123	9646
Exhibit H-5780. Supplemental Agreement, Hartford and Wheaton, 3/7/41	20130	9646
Exhibit H-5781. Do., Hartford and Anchor-Hocking (undated and unsigned by A-H.)	20139	9647
Sched. A—Contracts	20145	9650
Sched. B—Rates of royalty	20151	9655
Exhibit H-5782. License and Lease HSF-453—Hartford and Anchor-Hocking, 3/31/41	20152	9655
Index	20154	9656

EXHIBITS—Continued

	Original	Print
Contracts—Continued		
Exhibit H-5782. License and Lease HSF-453—Hartford and Anchor-Hocking, 3/31/41—Continued		
License	20155	9656
Sched. A—Machinery and accessories furnished	20172	9669
Sched. B—Installation of machinery	20173	9670
Sched. C—Permitted ware	20174	9670
Sched. D—Rates of royalty	20175	9671
Sched. E—List of patents	20176	9672
Exhibit H-5783. Supplemental Agreement—Hartford and Buck	20178	9673
Exhibit H-5784. Do., Hartford and Glenshaw	20187	9673
Exhibit H-5785. Supplemental Agreement, Hartford and Lamb	20196	9673
Exhibit H-5786. Do., with Latchford-Marble	20203	9673
Exhibit H-5787. License and Lease HSF-461—Hartford and Latchford-Marble, 4/29/41	20212	9674
Exhibit H-5788. Supplemental Agreement—Hartford and McKee	20238	9674
Exhibit H-5789. Do., Hartford and Olean	20246	9674
Exhibit H-5790. Do., Hartford and Thatcher	20255	9675
Exhibit H-5791. Supplemental Agreement—Hartford and Tygart Valley	20263	9675
Exhibit H-5793. Form of HSF License and Lease Agreement (Edition of 1941)	20303	9675
Exhibit H-5795. License and Lease No. HL—Edition of Aug. 1941	20353	9675
License	20355	9675
Schedule C—Permitted Ware	20373	9688
Exhibit H-5877. Agreement as to historical data T. R. & B. and Hartford, 8/14/25	20451	9688
Sched. A—Applications (Note)	20455	9690
Exhibit H-5922. Agreement—Hartford, A. R. Bethel and Bethel Engineering Co. and Hartford, 9/4/34	20460	9690
Exhibit O-5938. Assignment Owens Bottle Machine Co. to The Owens Bottle Machine Co. of license with Toledo Glass, dated 10/16/03	20473	9693
Exhibit O-5941. License Agreement 1/26/05—Toledo Glass and Libbey Glass Co	20475	9694
Exhibit O-5943. License Agreement Toledo Glass and Owens Bottle Machine Co., 2/25/15	20479	9697
Exhibit O-5944. Agreement between Toledo Glass and Owens Bottle Co., 7/3/22	20483	9699
Exhibit O-5948. Agreement—Toledo, Owens Bottle Machine Co. and Baldwin Travis, 12/16/03	20498	9709
Exhibit O-5995. License Agreement Owens Bottle Machine Co. and Toledo Glass and Ohio Bottle Co., 11/1/04	20519	9721
Exhibit O-5996. License Agreement Owens Bottle Machine Co., Toledo Glass and Northwestern, 11/1/04	20548	9738

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit O-5997. License Agreement Owens Bottle Machine Co., Toledo Glass and Louis Hollweg, 1/2/09	20575	9755
Notation—"Copy of Assignment submitted 11/16/09 written in this place on Mr. Hollweg's duplicate of this license", etc.	20595	9769
Exhibit O-5998. Agreement—Hazel-Atlas and Owens Bottle Machine Co., 5/20/09	20596	9769
Exhibit O-6004. Agreement Owens Bottle Machine and Charles Boldt Co., 10/28/09	20599	9772A
Exhibit O-6005. License Agreement Owens Bottle Machine Co., Toledo and Illinois, 1/18/11	20601	9773
Exhibit O-6015. Agreement Homer Brooke Co. and Owens Bottle Machine Co., 12/14/15	20612	9780
Exhibit O-6016. Agreement Owens Bottle Machine Co. and Graham Glass, 12/14/15	20615	9782
Exhibit O-6018. License Agreement Owens Bottle Machine, Toledo Glass, Coshocton Glass and American Bottle Co., 4/13/17	20619	9784
Exhibit O-6019. Agreement Owens Bottle Co. and Coshocton Glass, 8/8/22	20637	9797
Exhibit O-6020. License Agreement Owens Bottle Machine, American Bottle and Glenshaw, 5/7/18	20641	9799
Exhibit O-6021. Surrender of license between Owens Bottle Machine Co., American Bottle and Glenshaw, 4/30/20	20660	9812
Exhibit O-6022. License Agreement Owens Bottle Machine and Turner Bros.	20663	9813
Exhibit O-6023. Agreement Owens Bottle Co. and Turner Bros., 12/24/19	20683	9826
Exhibit O-6034. Agreement Illinois Glass and Cupples Co., 12/30/27	20687	9828
Exhibit O-6040. General Lehr Agreement Hartford and Owens Bottle Co., 1/2/26	20719	9831
Exhibit O-6041. Supplemental agreement amending Lehr agreement—Hartford and Owens, 3/21/27	20745	9843
Agreement	20746	9843
Exhibit O-6042. Supplemental Agreement amending Lehr Agreement—Hartford and Illinois, 7/20/27	20750	9845
Exhibit O-6043. Agreement—Hartford and Owens-Illinois, 6/12/30, on termination of Int. 55646	20755	9847
Exhibit O-6044. Supplemental Agreement—Hartford and Owens-Illinois—Int. 55646—11/12/30	20762	9852
Consent of Simplex Engineering Co.	20766	9853
Exhibit O-6045. Special Lehr Agreement—Hartford and Owens-Illinois, 2/18/31	20767	9854
Exhibit O-6046. Supplement Agreement re Dixon Lehrs-Hartford and Owens-Illinois, 2/18/31	20773	9856
Exhibit O-6047. Lehr Royalty Agreement Hartford and Owens-Illinois, 2/6/35	20776	9857

EXHIBITS—Continued

Contracts—Continued	Original	Print
Exhibit B-6093. Letter—F. C. Ball to Brockway Glass, re contracts of April 1933, dated 10/16/40	20788	9884A
Exhibit H-6107. Settlement Agreement 8/2/35—Hartford and Florida Glass	20789	9885
Exhibit H-6108. License and Lease Hwd. 14—Hartford and Berney-Bond Co., 4/26/23	20798	9887
Exhibit H-6109. General Agreement—Hartford and Berney-Bond, 2/15/26	20820	9887
Sched. D—Royalty rates	20847	9870
Exhibit H-6110. License and Lease Hwd. 26—Hartford and Pacific Coast Glass, 5/24/23	20849	9871
Exhibit H-6111. General Agreement Hartford-Fairmont and Illinois, 2/21/20	20877	9872
Exhibit O-6173. Amendment to General License—Owens-Illinois and Owens-Illinois Pacific Coast Co. to Hartford, 1/14/42	20915	9881
Exhibit O-6174. Amendment to General License—Hartford to Owens, 1/14/42	20918	9883
Sched. A—Rates of royalty	20922	9886
Exhibit O-6175. Amendment to Suction Inventions License—Hartford and Owens, 1/14/42	20924	9887
Exhibit O-6176. Amendment to Consolidated Feeder and Former License—Owens and Hartford, 1/14/42	20927	9888
Exhibit O-6177. Letter 3/14/30—A. T. S. to Owens re amendment to consolidated stacker and conveyor agreement of 10/1/35	20931	9891
Exhibit O-6179. Letter 1/2/42—Owens to H-A	20933	9892
Exhibit O-6182. Letter 1/9/42—Owens-Illinois Pacific to H-A	20934	9893
PATENTS:		
Exhibit 1888. List of Hartford stream feeding patents.	20935	9894
Exhibit 1990. Photostat of number plate for Feeder No. 9	21123	9894A
Exhibit 1991. List of patents	21124	9895
Exhibit 1992. Summary of patents in Exs. 1990, 1991 and H-5915	21127	9896
Exhibit 2008. Owens patents issued on applications involved in 138 interferences in Ex. 973, and not listed in 2 books of Owens patents—Exs. O-5952 and O-5953	21128	9897
Exhibit HA-5076B. H-A's. U. S. patents relating to manufacture of glassware	21130	9897

VOL. XIV

EXHIBITS

Patents—Continued	Original	Print
Exhibit H-5101. Lynch et al., 1,788,312	21866	9901
Exhibit H-5102. Steimer, 1,642,430	21926	9960
Exhibit H-5103. Lorenz, 1,800,191	21933	9966
Exhibit H-5104. Lorenz, 1,818,725	21999	10032
Exhibit H-5105. Ingle, 1,843,160	22016	10050
Exhibit H-5106. Sears, 1,848,555	22052	10086
Exhibit H-5108. H. & T., 1,948,218	22162	10144
Exhibit H-5109. H. & T., 1,948,219	22206	10186
Exhibit H-5216. Brooke, 723,983	22230	10210
Exhibit H-5221. Hitchcock, 805,068	22238	10218
Exhibit H-5222. Hitchcock, Re. 13,929	22246	10226
Exhibit H-5224. Steimer, 2,073,571	22254	10233
Certificate of correction	22255	10235
Exhibit H-5225. Steimer, 1,564,909	22284	10263
Exhibit H-5226. Steimer, 1,588,393	22294	10273
Exhibit H-5227. Steimer, 1,663,925	22304	10283
Exhibit H-5232. Lott, 1,382,994	22320	10293
Exhibit H-5248. Peiler, 1,573,742	22350	10323
Exhibit H-5249. Peiler, 1,655,391	22402	10401
Exhibit H-5284. Peiler, 2,073,572	22438	10437
Exhibit H-5285. Peiler, 1,923,554	22450	10449
Exhibit H-5286. Howard, 1,797,206	22474	10473
Exhibit H-5287. Howard, 1,892,765	22488	10523
Exhibit H-5356. List of Hartford Suction patents	22503	10539
Exhibit H-5374. Drey, 1,146,694	23309	10541
Exhibit H-5386. Canfield, 1,260,637	23314	10547
Exhibit H-5387. Chamberlin, 1,256,979	23342	10587
Exhibit H-5388. British, 138,895	23354	10605
Exhibit H-5425. Lott, 1,840,458	23360	10615
Exhibit H-5427. Tucker et al., 1,864,275	23372	10627
Exhibit H-5463. Lott, 1,458,834	23403	10659
Exhibit H-5471. Tucker et al., 1,512,566	23410	10665
Exhibit H-5482. Tucker et al., 1,908,936	23416	10671
Exhibit H-5489. Rankin, 1,600,361	23458	10727
Exhibit H-5491. Lobb, 1,852,171	23466	10741
Exhibit H-5525. Howard, 1,315,668	23588	10801
Exhibit H-5527. Woods et al., 1,790,397	23598	10829
Exhibit HA-5678. List of H-A. Plunger patents	23649	10881
Exhibit HA-5679. List of H-A. Forming Machine patents	23651	10882
Exhibit C-5868. Smith, Re. 19439	23915	10885
Exhibit H-5884. List of patents acquired by Hartford from N-W. Co.	23930	10901
Exhibit H-5912. List of patents acquired by Hartford from Bethel Engineering Co.	23973	10901
Exhibit H-5915. List of patents applying to Hartford Single Feeder	24014	10901

EXHIBITS—Continued

Patents—Continued	Original	Print
Exhibit H-5915(a). Patents applying to Htf'd. Single Feeder	24017	10903
Peiler, 1,589,304	24072	10903
Peiler, 1,631,107	24127	10914
Exhibit H-5915B. Patents applying to Hartford Single Feeders (Acquired)	24568	10936
Soubier, 1,574,709	24581	10936
Ferngren, 1,574,739	24598	10949
Steimer, 2,073,573	24840	10953
Exhibit H-5916. Patents applying to Hartford I.S. Forming Machines	24843	10955
Exhibit H-5917. List of patents applying to Hartford 28 Paste Mold Machine	25028	10955
Exhibit H-5918. List of patents applying to Hartford Lehrs	25155	10956
Exhibit H-5918(a). Set of patents applying to Hartford Lehrs	25161	10957
Mulholland, Re. 17,263	25190	10957
Ingle, 1,583,046	25217	10976
Mulholland, 1,840,463	25379	10983
Exhibit H-5919. List of Hartford patents applying to certain Hartford machines	25603	10997
Exhibit H-5920. List of Hartford miscellaneous patents	25605	10997
Exhibit H-5923. Set of patents acquired by Hartford from Howard	25619	10998
Index	25620	10998
1,231,610	25637	10998A
1,592,299	25687	10998E
Exhibit H-5924. List of patents acquired from Miller by Hartford	25808	10999
Exhibit H-5925. List of patents acquired by Hartford from Tucker & Reeves	26130	10999
Exhibit H-5926. List of patents acquired by Hartford from Steimer	26410	11000
Exhibit H-5927. List of patents acquired by Hartford from Rankin	26508	11001
Exhibit H-5928. List of patents acquired by Hartford from O'Neill	26590	11001
Exhibit H-5929. List of patents acquired by Hartford from Tygart Valley	26998	11002
Exhibit H-5930. List of patents acquired by Hartford from Brockway	27042	11002
Exhibit H-5931. List of Hartford patents on "Downward Suction"	27054	11003
Exhibit H-5932. List of Hartford patents on "Electric Feeding"	27055	11003
Exhibit H-5933. List of Hartford patents on "Force Feeding"	27056	11003
Exhibit H-5934. Danner, 1,218,598	27057	11004

EXHIBITS—Continued

Patents—Continued	Original	Print
Exhibit H-5980. Brookfield, 883,779	27071	11016
Exhibit B-6081. Certified copy of McCauley 1,322,318:		
Certificate	27099	11023
Patent	27100	11024

VOL. XV

EXHIBITS

Exhibit O-6097. List of O'Neill patents assigned to Owens	27117	11029
Exhibit H-6099. Patent applications filed by H-E. in 1927–1929, incl.	27488	11029
List of patents	27494	11032
Exhibit H-6100. Patents in infringement suits listed in Ex. 973	27523	11041
Exhibit H-6102. Hartford patents issued since stipulation of 8/20/40 (Ex. 973) to Dec. 31/41	27539	11045
Exhibit H-6103. Hartford's "503" patents	27542	11046
Explanation and summary	27543	11046
Feeders	27545	11048
Formers	27566	11055
Lehrs	27580	11060
Take-outs, Conveyors, etc.	27586	11062
Exhibit H-6104. Patents under which Hartford is or has been licensed, and which apply or have applied to Hartford feeders and formers and lehrs	27592	11064
Exhibit H-6105. Hartford patent plates:		
Explanation and index	27598	11066
P-N. Feeders	27602	11067
Single Feeder	27604	11068
Bethel feeders	27607	11069
Howard feeders	27610	11070
Illinois-Pacific feeders	27612	11071
Kucera feeders	27615	11072
Miller feeders	27617	11073
O'Neill feeders	27619	11074
Root feeders	27621	11075
T. & R. feeders	27624	11076
Consolidated plunger feeder patent plates	27627	11078
I.S. Machine	27639	11084
12 Machine	27641	11085
Lehr	27646	11087
Consolidated List	27649	11088
Exhibit H-6106. Hartford patents on Hartford patent plates	27672	11100
Exhibit O-6183. List of patents	27673	11100

EXHIBITS—Continued

INTERFERENCES:	Original	Print
Exhibit 1893. Excerpt from Brief before Law Examiner in Int. 48326	27978	11101
Exhibit 2037. Folder for Int. 51026:		
Docket	28534	11112
Exhibit 2040. Folder for Int. 53729	28694	11113
Docket	28828	11114
Exhibit 2041. Folder for Int. 53835	28830	11116
Docket	28845	11117
Exhibit 2043. Folder for Int. 54021	28864	11118
Docket	28895	11119
Exhibit 2047. Folder for Int. 54997	29157	11120
Docket	29170	11121
Exhibit 2050. Folder for Int. 55295	29466	11122
Docket	29475	11123
Exhibit 2053. Folder for Int. 55646	29757	11124
Docket	29934	11125
Exhibit 2062. Folder for Int. 58895	30237	11127
Docket	30255	11128
Exhibit 2063. Folder for Int. 58917	30256	11129
Docket	30267	11129A
Exhibit 2068. Folder for Int. 60700	30400	11130
Docket	30415	11131
Exhibit 2071. Folder for Int. 61630	30470	11132
Docket	30479	11133
Exhibit 2092. Folder for Int. 75007	31658	11134
Interference papers	31660	11135
Exhibit H-5228. 40,665 File wrapper	31753	11168
Exhibit H-5233. 39,376 File wrapper	31973	11184
Exhibit H-5234. 43,442 File wrapper	33219	11242
Exhibit H-5250. 44,251 File wrapper	34126	11259
Exhibit H-5251. 44,252 Interference papers	37073	11291
Exhibit H-5252. 46,677 File wrapper	37312	11295
Exhibit H-5253. 47,297 File wrapper	38797	11298
Exhibit H-5260. 48,327 File wrapper	39445	11302
Exhibit H-5261. 48,328 File wrapper	40201	11306
Exhibit H-5259. 48,326 File wrapper	40566	11309
Exhibit H-5262. 48,329 File wrapper	41679	11430
Exhibit H-5263. 48,330 File wrapper	42075	11433
Exhibit H-5264. 48,331 File wrapper	42349	11435
Exhibit H-5265. 48,414 File wrapper	42483	11441
Exhibit H-5266. 48,415 File wrapper	42507	11445
Exhibit H-5267. 48,447 File wrapper	42663	11447
Exhibit H-5268. 49,069 File wrapper	43062	11451
Exhibit H-5270. 50,782 File wrapper	43268	11454
Exhibit H-5272. 50,890 File wrapper	43551	11467

VOL. XVI

EXHIBITS

Interferences—Continued	Original	Print
Exhibit H-5273. 50,891 File wrapper	43762	11472
Exhibit H-5274. 50,895 File wrapper	44022	11477
Exhibit H-5275. 51313—Petition by Hartford, assignee of Steimer	44124	11481
File wrapper	44149	11485
Exhibit H-5276. 51,314 File wrapper	44447	11520
Exhibit H-5279. Amendment 10/19/20 in Howard S.N. 180,795	45156	11523
Exhibit H-5280. 40,122 File wrapper	45166	11529
Exhibit H-5289. 39,375 File wrapper	45180	11531
Exhibit H-5290. 39,377 File wrapper	45316	11539
Exhibit H-5291. 39,379 Declaration	45393	11543
Exhibit H-5292. 39,429 File wrapper	45397	11545
Exhibit H-5400. 45,237 File wrapper	45527	11548
Exhibit H-5486. Power of attorney to R.D.B. and notice of acceptance, in T. & R. 1,864,275	46049	11607
Exhibit H-5509. 48,582 File wrapper	46056	11610
Exhibit H-5510. 50,700 File wrapper	46191	11620
Exhibit H-5518. Face of file wrapper and index in 50700	46235	11627
Exhibit H-5543. Do., 39,376	46239	11631
Exhibit H-5544. Do., 43,442	46256	11647
Exhibit H-5545. Do., 46,677	46263	11653
Exhibit H-5546. Do., 44,251	46270	11660
Exhibit H-5552. Do., 48,326	46278	11667
Exhibit H-5561. Do., 39,374	46285	11674
Exhibit H-5563. Do., 39,377	46293	11680
Exhibit H-5566. Do., 39,428	46307	11684
Exhibit H-5567. Do., 39,429	46312	11688
Exhibit H-5568. Do., 40,122	46317	11693
Exhibit H-5572. Do., 40,665	46332	11695
Exhibit H-5574. Do., 42,601	46340	11699
Exhibit H-5580. Do., 44,780	46359	11703
Exhibit H-5581. Do., 45,287	46364	11708
Exhibit H-5583. Do., 47,297	46372	11713
Exhibit H-5587. Do., 48,200	46391	11718

VOL. XVII

EXHIBITS

Exhibit H-5591. Face of file wrapper and index 48,266	46401	11723
Exhibit H-5592. Do., 48,267	46404	11725
Exhibit H-5593. Do., 48,327	46409	11730
Exhibit H-5593. Do., 48,328	46416	11737
Exhibit H-5594. Do., 48,329	46422	11743
Exhibit H-5595. Do., 48,330	46428	11749

EXHIBITS—Continued

Interferences—Continued	Original	Print
Exhibit H-5596. Do., 48,331	46433	11754
Exhibit H-5597. Do., 48,413	46437	11758
Exhibit H-5598. Do., 48,414	46440	11761
Exhibit H-5599. Do., 48,415	46443	11764
Exhibit H-5600. Do., 48,416	46448	11769
Exhibit H-5601. Do., 48,447	46451	11772
Exhibit H-5603. Do., 49,069	46461	11778
Exhibit H-5607. Do., 50,772	46475	11782
Exhibit H-5608. Do., 50,773	46478	11785
Exhibit H-5609. Do., 50,774	46481	11788
Exhibit H-5610. Do., 50,782	46484	11791
Exhibit H-5614. Do., 50,890	46501	11795
Exhibit H-5615. Do., 50,891	46506	11800
Exhibit H-5617. Do., 50,893	46515	11805
Exhibit H-5619. Do., 50,895	46521	11808
Exhibit H-5621. Do., 51,313	46528	11812
Exhibit H-5622. Do., 51,314	46533	11817
Exhibit H-5626. Do., 52,257	46549	11823
Exhibit H-5627. Do., 52,258	46552	11826
Exhibit H-5628. Do., 52,259	46555	11829
Exhibit H-5629. Do., 52,260	46558	11832
Exhibit H-5836. Int. 48,326—"The Motions of our Adversaries"	48186	11835a
Exhibit H-5935. Letter 6/8/22 suggesting claims in Peiler case 1267	48189	11835d
Declaration of Int. 48,414	48191	11835f
Declaration of Int. 48,330	48193	11835h
Exhibit H-6122. Extracts from 39,428	49084	11836
Exhibit H-6126. Do., 42,601	49446	11837
Exhibit H-6128. Do., 44,608	49559	11843
Exhibit H-6136. Do., 48,413	49969	11846
Exhibit H-6137. Do., 48,416	49990	11849
Exhibit H-6139a. Face of file wrapper and index 48,948	50074	11852
Exhibit H-6145. Extracts from 50,893	50252	11855
Exhibit H-6149. Do., 56,367	50525	11857
BOOKS, ETC.:		
Exhibit H-5220. Vol. V of Record in H-E. v. H-A. (C.C.A. 3)	50559	11859
Exhibit 16. Formation Agreement—H E. Co.	51310	11943
Exhibit H-5355A. Peiler Patents:		
Index	51406	11997
1,405,936	51584	12000
1,574,736	51653	12007
1,662,436	51874	12014

VOL. XVIII

EXHIBITS

Books, Etc.—Continued	Original	Print
Exhibit H-5355B. Peiler Patents:		
Index	52212	12027
Exhibit H-5680. Patents of E. H. Lorens—Sole and Joint:		
Index of Forming machines	52936	12098
Index to Stackers	53285	12098
Index to Feeders	53351	12098
Index to Miscellaneous	53365	12098
Exhibit O-5952. Owens Patents:		
Index	53420	12099
759,742	53423	12099
Exhibit O-5953. Owens Patents:		
Index	53667	12103
Exhibit 1390–1485. Data re Owens' Shipments	54531	12105
Exhibit H-5230. Record in H-E. v. Coe	54626	12113
Exhibit H-5848. Brief in Hitchcock Feeder suit	55945	12171
Exhibit H-5208. Owens-Hazel contract	57577	12268

LETTERS, ETC. (For description, see p. 79 et seq. of this volume.)

Exhibit 2	58569	12367
Exhibit 3	58570	12368
Exhibit 4–5	58571	12368
Exhibit 6	58573	12369
Exhibit 7	58575	12371
Exhibit 8	58584	12380
Exhibit 9	58585	12381
Exhibit 10	58587	12382
Exhibit 11–13	58591	12386
Exhibit 14	58594	12388
Exhibit 15	58596	12389
Exhibit 17	58601	12395
Exhibit 20	58605	12396
Exhibit 21	58608	12398
Exhibit 22	58610	12400
Exhibit 23	58618	12406
Exhibit 24	58627	12412
Exhibit 25	58633	12416
Exhibit 26	58642	12422
Exhibit 27	58656	12432
Exhibit 29	58667	12438
Exhibit 30	58669	12439
Exhibit 31	58675	12442
Exhibit 32	58684	12448
Exhibit 33	58690	12452
Exhibit 34	58695	12455
Exhibit 35	58697	12457
Exhibit 36	58703	12459

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 37	58707	12462
Exhibit 39	58724	12469
Exhibit 40	58725	12471
Exhibit 41	58727	12473
Exhibit 42	58730	12477
Exhibit 43	58735	12482
Exhibit 44	58737	12484
Exhibit 46	58740	12486
Exhibit 47	58742	12487
Exhibit 48	58767	12515
Exhibit 49	58769	12516
Exhibit 50	58771	12517
Exhibit 51	58778	12522
Exhibit 52	58780	12523
Exhibit 53	58785	12527
Exhibit 54	58786	12527
Exhibit 55	58790	12531
Exhibit 57	58792	12533
Exhibit 58	58795	12535
Exhibit 59	58800	12540
Exhibit 60	58804	12544
Exhibit 61	58809	12548
Exhibit 62-65	58810	12550
Exhibit 67	58812	12551
Exhibit 68	58813	12552
Exhibit 69	58817	12557
Exhibit 70	58818	12558
Exhibit 71	58820	12560
Exhibit 72	58821	12561
Exhibit 73	58822	12562
Exhibit 74	58825	12565
Exhibit 75	58836	12570
Exhibit 76	58837	12570
Exhibit 77	58842	12574
Exhibit 78	58846	12578
Exhibit 79	58847	12578
Exhibit 80	58850	12579
Exhibit 104	58861	12590
Exhibit 109	58862	12592
Exhibit 110	58863	12593
Exhibit 111	58867	12597
Exhibit 114	58869	12599
Exhibit 115	58871	12601
Exhibit 116	58879	12609
Exhibit 117	58880	12610
Exhibit 118	58887	12617
Exhibit 119	58889	12620
Exhibit 120	58891	12622

VOL. XIX

EXHIBITS

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 121	58900	12631
Exhibit 122	58901	12632
Exhibit 123	58905	12636
Exhibit 124	58908	12637
Exhibit 125	58910	12638
Exhibit 126	58911	12639
Exhibit 127	58915	12641
Exhibits 128–130	58918	12644
Exhibit 131	58921	12645
Exhibit 132	58922	12645
Exhibit 133	58923	12646
Exhibit 134	58926	12648
Exhibit 135	58928	12650
Exhibits 136–137	58930	12652
Exhibit 138	58932	12654
Exhibit 139	58934	12656
Exhibit 140	58937	12659
Exhibit 141	58942	12662
Exhibit 150	58959	12674
Exhibit 155	58960	12675
Exhibit 160	58961	12676
Exhibit 162	58963	12678
Exhibit 164	58965	12681
Exhibit 165	58966	12681
Exhibit 166	58971	12684
Exhibit 167	58975	12688
Exhibit 168	58976	12688
Exhibit 168A	58978	12689
Exhibit 169	58980	12692
Exhibit 171	58982	12693
Exhibit 172	58985	12695
Exhibit 173	58988	12698
Exhibit 174	58990	12701
Exhibit 175	58991	12702
Exhibit 176	58993	12702
Exhibit 177	58994	12703
Exhibit 178	58995	12703
Exhibit 179	58997	12705
Exhibit 180	58998	12705
Exhibit 181	58999	12706
Exhibit 182	59001	12707
Exhibit 183	59003	12708
Exhibit 184	59005	12710
Exhibit 185	59006	12710
Exhibit 187	59010	12711
Exhibit 188	59012	12712

EXHIBITS—Continued

rs, etc.—Continued. (For description, see p. 79 et seq. this volume.)	Original	Print
Exhibit 189	59014	12713
Exhibit 190	59018	12716
Exhibit 191	59020	12717
Exhibit 192	59022	12718
Exhibit 193	59023	12719
Exhibit 194	59025	12721
Exhibit 197	59026	12722
Exhibit 201	59027	12723
Exhibit 202	59028	12724
Exhibit 203	59030	12727
Exhibit 204	59032	12728
Exhibit 205	59034	12730
Exhibits 206–207	59036	12732
Exhibit 208	59038	12735
Exhibits 209–210	59044	12740
Exhibit 211	59046	12741
Exhibit 212	59048	12741
Exhibits 213–216	59049	12742
Exhibit 217	59053	12743
Exhibit 218	59054	12743
Exhibit 219	59055	12744
Exhibit 220	59056	12744
Exhibit 221	59057	12745
Exhibit 222	59058	12746
Exhibit 223	59059	12746
Exhibit 224	59060	12747
Exhibit 225	59061	12748
Exhibit 226	59062	12748
Exhibit 227	59065	12750
Exhibit 228	59067	12751
Exhibit 229	59069	12754
Exhibit 230	59071	12754
Exhibit 232	59072	12754
Exhibit 233	59076	12755
Exhibit 235	59079	12758
Exhibit 236	59082	12759
Exhibit 238	59084	12760
Exhibit 239	59085	12761
Exhibit 241	59087	12763A
Exhibit 244	59089	12765
Exhibit 245	59092	12768
Exhibit 246	59093	12769
Exhibit 247	59096	12772
Exhibit 249	59097	12773
Exhibit 251	59103	12774
Exhibit 252	59105	12776
Exhibit 253	59107	12777
Exhibit 254	59114	12782
Exhibit 255	59118	12787
Exhibit 256	59122	12790

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 257	59134	12800
Exhibit 259	59153	12807
Exhibit 260	59154	12808
Exhibit 261	59156	12809
Exhibit 262	59159	12811
Exhibit 268	59163	12812
Exhibit 271	59168	12813
Exhibit 274	59173	12814
Exhibit 275	59174	12815
Exhibit 276	59179	12819
Exhibit 277	59182	12822
Exhibit 278	59183	12823
Exhibit 279	59184	12824
Exhibit 280	59185	12825
Exhibit 281	59187	12825
Exhibit 282	59188	12826
Exhibit 285	59191	12826
Exhibit 286	59194	12828
Exhibit 289	59197	12830
Exhibit 290	59198	12831
Exhibit 291	59199	12832
Exhibit 292	59200	12833
Exhibit 293	59202	12834
Exhibit 294	59204	12836
Exhibit 295	59206	12837
Exhibit 296	59210	12839
Exhibit 297	59220	12851
Exhibit 298	59221	12851
Exhibit 299	59222	12852
Exhibit 300	59226	12855
Exhibit 301	59228	12857
Exhibit 304	59231	12860
Exhibit 308	59232	12862
Exhibit 309	59235	12863
Exhibit 310	59240	12868
Exhibit 311	59241	12869
Exhibit 312	59242	12869
Exhibit 313	59246	12873
Exhibit 314	59248	12874
Exhibit 315	59253	12878
Exhibits 316–318	59254	12879
Exhibit 319	59257	12882
Exhibit 320	59258	12883
Exhibit 321	59269	12894
Exhibit 322	59270	12895
Exhibit 323	59272	12897
Exhibit 324	59274	12899
Exhibits 325–326	59277	12902
Exhibit 331	59279	12905
Exhibit 332	59281	12906

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 333	59283	12907
Exhibit 335	59286	12909
Exhibit 338	59288	12910
Exhibit 339	59289	12911
Exhibit 341	59291	12913
Exhibit 342	59292	12913
Exhibit 343	59294	12915
Exhibit 344	59295	12916
Exhibit 345	59296	12916
Exhibit 346	59297	12917
Exhibit 347	59298	12917
Exhibit 348	59299	12918
Exhibit 349	59300	12919
Exhibit 350	59301	12920
Exhibit 351	59302	12921
Exhibit 353	59303	12921
Exhibit 354	59304	12922
Exhibit 355	59305	12923
Exhibit 356	59306	12923
Exhibit 357	59307	12924
Exhibit 358	59308	12924
Exhibit 359	59311	12927
Exhibit 360	59312	12928
Exhibit 361	59313	12929
Exhibit 362	59314	12930
Exhibit 363	59317	12932
Exhibit 365	59318	12933
Exhibit 366	59319	12934
Exhibit 367	59320	12935
Exhibit 368	59321	12936
Exhibit 369	59322	12936
Exhibit 370	59323	12937
Exhibit 371	59324	12937
Exhibit 372	59326	12939
Exhibit 373	59327	12939
Exhibit 374	59328	12940
Exhibit 375	59329	12941
Exhibit 376	59331	12943
Exhibit 377	59332	12944
Exhibit 378	59334	12946
Exhibit 380	59335	12947
Exhibit 382	59338	12948
Exhibit 384	59340	12948
Exhibit 385	59341	12950
Exhibit 386	59342	12951
Exhibit 387	59346	12954
Exhibit 388	59352	12958
Exhibit 389	59380	12977
Exhibit 390	59383	12979
Exhibit 391	59387	12983

VOL. XX

EXHIBITS

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 392	59389	12985
Exhibit 393	59408	12995
Exhibit 394	59419	13000
Exhibit 395	59422	13001
Exhibit 396	59428	13006
Exhibits 397–399	59430	13008
Exhibit 400	59433	13009
Exhibit 401	59434	13010
Exhibit 402	59436	13011
Exhibit 403	59439	13012
Exhibit 404	59441	13014
Exhibit 405	59442	13014
Exhibit 406	59445	13017
Exhibit 407	59448	13019
Exhibit 408	59450	13020
Exhibit 409	59455	13024
Exhibit 410	59458	13025
Exhibit 413	59459	13025
Exhibit 414	59465	13031
Exhibits 416–417	59471	13036
Exhibit 418	59473	13037
Exhibit 419	59474	13037
Exhibit 420	59476	13039
Exhibit 421	59477	13039
Exhibit 422	59479	13041
Exhibit 423	59482	13044
Exhibit 424	59483	13045
Exhibits 425–429	59485	13047
Exhibit 430	59490	13053
Exhibit 431	59491	13053
Exhibit 432	59492	13054
Exhibit 433	59494	13055
Exhibit 434	59496	13057
Exhibit 435	59497	13058
Exhibit 436	59499	13060A
Exhibit 439	59504	13061
Exhibit 440	59505	13061
Exhibit 441	59506	13062
Exhibit 442	59508	13063
Exhibit 443	59509	13064
Exhibit 444	59510	13065
Exhibit 445	59512	13066
Exhibit 446	59513	13067
Exhibit 447	59515	13068
Exhibit 448	59516	13069
Exhibit 449	59517	13070

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 450	59518	13071
Exhibits 451–452	59519	13072
Exhibit 453	59521	13073
Exhibit 454	59522	13073
Exhibits 455–456	59523	13074
Exhibit 457	59525	13075
Exhibit 458	59526	13076
Exhibit 459	59527	13077
Exhibit 460	59528	13078
Exhibit 461	59531	13081
Exhibit 463	59533	13082
Exhibit 464	59534	13083
Exhibit 465	59535	13083
Exhibit 466	59536	13084
Exhibit 467	59538	13085
Exhibit 468	59539	13086
Exhibit 469	59540	13087
Exhibit 470	59542	13088
Exhibit 471	59543	13089
Exhibit 472	59546	13091
Exhibit 473	59547	13091
Exhibit 474	59548	13092
Exhibit 476	59550	13093
Exhibit 477	59551	13094
Exhibit 478	59552	13095
Exhibit 479	59554	13097
Exhibit 481	59557	13098
Exhibit 482	59558	13099
Exhibit 483	59560	13100
Exhibit 484	59561	13100
Exhibit 485	59563	13102
Exhibit 487	59566	13104
Exhibit 488	59567	13105
Exhibit 489	59570	13106
Exhibit 490	59572	13107
Exhibits 491–492	59574	13108
Exhibit 493	59576	13109
Exhibit 494	59578	13110
Exhibit 495	59580	13111
Exhibit 496	59582	13112
Exhibit 497	59583	13112A
Exhibit 498	59584	13113
Exhibit 498A	59585	13113
Exhibit 501	59588	13114
Exhibit 502	59589	13114
Exhibit 503	59591	13114C
Exhibit 504	59592	13114D
Exhibit 505	59593	13115
Exhibit 506	59594	13115
Exhibit 507	59597	13118

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 508	59598	13118
Exhibit 509	59599	13120
Exhibit 510	59600	13121
Exhibits 511–514	59601	13122
Exhibit 515	59605	13126
Exhibits 516–517	59605	13126
Exhibit 518	59609	13131
Exhibit 519	59611	13132
Exhibits 520–526	59613	13134
Exhibit 535	59628	13149
Exhibit 536	59630	13151
Exhibit 537	59632	13153
Exhibit 538	59634	13155
Exhibit 539	59636	13157
Exhibit 540	59637	13157
Exhibit 541	59638	13158
Exhibit 548	59647	13158
Exhibit 549	59648	13159
Exhibit 550	59649	13160
Exhibit 551	59652	13162
Exhibit 552	59653	13163
Exhibit 553	59654	13163
Exhibit 554	59655	13164
Exhibit 555	59657	13166
Exhibit 556	59659	13167
Exhibit 557	59661	13168
Exhibit 558	59667	13172
Exhibit 559	59668	13173
Exhibit 560	59670	13175
Exhibit 561	59671	13176
Exhibit 562	59672	13177
Exhibit 563	59673	13177
Exhibit 564	59675	13179
Exhibit 567	59676	13180
Exhibit 574	59678	13181
Exhibit 575	59684	13185
Exhibit 577	59686	13188
Exhibit 582	59690	13192
Exhibit 583	59692	13195
Exhibit 584	59694	13196
Exhibit 585	59697	13198
Exhibit 586	59699	13200
Exhibit 587	59701	13202
Exhibit 588	59702	13203
Exhibit 589	59704	13205
Exhibit 590	59705	13206
Exhibit 591	59706	13206
Exhibit 597	59718	13210
Exhibit 600	59719	13211
Exhibit 608	59727	13219

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 609	59731	13223
Exhibit 610	59735	13227
Exhibit 611	59737	13228
Exhibit 612	59738	13230
Exhibit 613	59745	13237
Exhibit 614	59748	13240
Exhibit 615	59749	13242
Exhibit 616	59751	13243
Exhibit 617	59755	13244
Exhibit 618	59756	13245
Exhibit 619	59760	13249
Exhibit 620	59767	13257
Exhibit 621	59769	13258
Exhibit 622	59773	13263
Exhibit 623	59776	13266
Exhibit 624	59777	13267
Exhibit 625	59779	13269
Exhibit 626	59782	13271
Exhibit 627	59788	13275
Exhibit 628	59789	13276
Exhibit 629	59793	13280
Exhibit 630	59796	13281
Exhibit 631	59801	13289
Exhibit 632	59804	13291
Exhibit 633	59806	13294
Exhibit 634	59808	13295
Exhibit 635	59810	13296
Exhibit 636	59812	13297
Exhibit 637	59813	13297
Exhibit 638	59814	13298
Exhibit 639	59815	13299
Exhibit 640	59816	13300
Exhibits 641–642	59817	13300
Exhibit 643	59819	13301
Exhibit 644	59822	13303
Exhibit 645	59825	13306
Exhibits 646–647	59828	13310
Exhibit 648	59830	13311
Exhibit 649	59832	13313
Exhibit 650	59835	13316
Exhibit 651	59839	13320
Exhibit 654	59842	13321
Exhibit 655	59843	13322
Exhibit 656	59845	13324
Exhibit 657	59849	13325
Exhibit 658	59851	13326
Exhibit 659	59852	13327
Exhibit 660	59853	13327
Exhibit 661	59854	13328
Exhibit 662	59857	13330

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 663	59859	13332
Exhibit 664	59861	13334
Exhibits 665–666	59862	13334
Exhibit 667	59866	13335
Exhibit 668	59867	13336
Exhibit 669	59868	13337
Exhibit 670	59871	13339
Exhibit 671B	59873	13339
Exhibit 672	59875	13341
Exhibit 673	59877	13342
Exhibit 674	59879	13344
Exhibit 675	59883	13347
Exhibit 676	59885	13348
Exhibit 677	59890	13351
Exhibit 679	59897	13353
Exhibit 680	59900	13356
Exhibit 681	59901	13357
Exhibit 682	59903	13358
Exhibit 683	59906	13361
Exhibit 684	59908	13363
Exhibit 685	59909	13364
Exhibit 686	59910	13365
Exhibit 687	59911	13366
Exhibit 688	59913	13369
Exhibit 689	59915	13370
Exhibit 690	59921	13374
Exhibit 691	59922	13375
Exhibit 692	59923	13376
Exhibit 693	59925	13378
Exhibit 694	59926	13379
Exhibit 695	59933	13384
Exhibit 696	59939	13389
Exhibit 697	59941	13391
Exhibit 698	59943	13392
Exhibit 699	59945	13394
Exhibit 700	59948	13397
Exhibit 702	59952	13398
Exhibit 703	59954	13400
Exhibit 705	59960	13402
Exhibit 706	59962	13403
Exhibit 707	59963	13403
Exhibit 708	59966	13406
Exhibit 709	59969	13409
Exhibit 710	59972	13412
Exhibit 715	59979	13413
Exhibit 716	59980	13414
Exhibit 717	59982	13416
Exhibit 718	59985	13419
Exhibit 719	59988	13422

VOL. XXI

EXHIBITS

Letters, etc.—Continued. (For description, see p. 70 et seq. of this volume.)	Original	Print
Exhibit 730	59989	13423
Exhibit 731	59990	13424
Exhibit 732–736	59992	13424A
Exhibit 728–729	59997	13427
Exhibit 721	60000	13428B
Exhibit 732	60001	13429
Exhibit 734–738	60005	13430A
Exhibit 741–741a	60010	13434A
Exhibit 742–746	60013	13435
Exhibit 747	60017	13440A
Exhibit 749–757	60020	13441
Exhibit 761–764	60032	13445
Exhibit 765	60036	13445B
Exhibit 766	60038	13449
Exhibit 767	60039	13449
Exhibit 768–769	60041	13450A
Exhibit 771–773	60044	13451
Exhibit 775	60048	13453
Exhibit 776	60050	13454
Exhibit 777–778	60052	13455
Exhibit 780–781	60055	13456
Exhibit 783	60057	13459
Exhibit 784–787	60060	13461
Exhibit 791	60065	13465
Exhibit 792	60066	13466
Exhibit 793	60068	13467
Exhibit 794	60069	13468
Exhibit 795	60071	13470
Exhibit 796–797	60073	13472
Exhibit 799–801	60076	13473
Exhibit 802	60079	13475
Exhibit 803	60083	13478
Exhibit 809	60088	13478
Exhibit 810	60091	13479
Exhibit 811	60093	13480
Exhibit 812	60095	13481
Exhibit 815	60100	13482
Exhibit 817	60103	13483
Exhibit 818	60104	13484
Exhibit 819–820	60107	13485
Exhibit 823–829	60111	13487
Exhibit 831–832	60119	13496
Exhibit 833–835	60121	13498
Exhibit 837	60125	13501
Exhibit 839	60131	13502

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 840	60122	13502B
Exhibit 841–843	60124	13503
Exhibit 844	60137	13505
Exhibit 845	60139	13506
Exhibit 847	60142	13508
Exhibit 848–849	60144	13510
Exhibit 850	60146	13511
Exhibit 851	60148	13512
Exhibit 852	60150	13514
Exhibit 853	60151	13515
Exhibit 854	60153	13518
Exhibit 861	60160	13519
Exhibit 862	60161	13521
Exhibit 863	60166	13527
Exhibit 864	60167	13527
Exhibit 865	60169	13528
Exhibit 872	60178	13531
Exhibit 873–877	60180	13532
Exhibit 879–880	60185	13534
Exhibit 882	60188	13536B
Exhibit 885	60199	13537
Exhibit 886	60201	13538
Exhibit 887	60203	13540
Exhibit 888	60204	13541
Exhibit 889	60207	13544
Exhibit 890	60209	13546
Exhibit 891	60214	13551
Exhibit 892	60216	13552
Exhibit 893	60217	13553
Exhibit 894	60219	13556
Exhibit 895	60221	13557
Exhibit 900	60227	13559
Exhibit 902	60230	13560
Exhibit 903	60232	13562
Exhibit 907–908	60238	13566
Exhibit 910–911	60240	13567
Exhibit 912	60242	13569
Exhibit 913	60244	13570
Exhibit 915	60248	13572
Exhibit 918	60252	13573
Exhibit 919–927	60254	13574
Exhibit 928	60263	13579
Exhibit 929–931	60266	13581
Exhibit 934	60271	13585
Exhibit 937–939	60273	13586
Exhibit 940	60276	13587
Exhibit 941–943	60278	13589
Exhibit 944	60281	13591

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 945	60283	13582
Exhibit 947	60284	13583
Exhibit 948–950	60285	13585
Exhibit 951	60288	13586
Exhibit 952	60290	13596
Exhibit 953	60291	13590
Exhibit 954	60294	13601
Exhibit 955	60295	13602
Exhibit 956	60296	13603
Exhibit 957	60298	13605
Exhibit 958	60299	13606
Exhibit 959	60300	13607
Exhibit 960	60302	13608
Exhibit 964	60307	13608
Exhibit 965–968	60311	13612
Exhibit 974	60318	13615
Exhibit 977	60321	13616
Exhibit 978	60323	13616C
Exhibit 980	60335	13618
Exhibit 981	60341	13622
Exhibit 982	60376	13649
Exhibit 983	60380	13651
Exhibit 989	60386	13653
Exhibit 990	60387	13653
Exhibit 991	60389	13655
Exhibit 992	60391	13656
Exhibit 993	60394	13658
Exhibit 994	60395	13659
Exhibit 995–997	60397	13660
Exhibit 998	60400	13662
Exhibit 1001	60403	13662C
Exhibit 1002	60404	13663
Exhibit 1003	60406	13664
Exhibit 1004–1015	60408	13665
Exhibit 1019–1022	60423	13673
Exhibit 1024–1027	60427	13677
Exhibit 1029–1032	60432	13680
Exhibit 1033	60436	13683
Exhibit 1034	60446	13688
Exhibit 1035	60447	13688
Exhibit 1038	60451	13689
Exhibit 1041–1042	60455	13691
Exhibit 1043	60457	13692
Exhibit 1044–1046	60459	13693
Exhibit 1050	60465	13696
Exhibit 1052	60467	13696
Exhibit 1053	60468	13997
Exhibit 1054	60470	13699
Exhibit 1055	60471	13699

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1056	60472	13701
Exhibit 1057	60475	13703
Exhibit 1058	60476	13704
Exhibit 1059	60477	13706
Exhibit 1060	60478	13707
Exhibit 1060A	60480	13708
Exhibit 1061–1062	60482	13710
Exhibit 1064	60485	13712
Exhibit 1065	60486	13713
Exhibit 1067–1068	60489	13714
Exhibit 1069	60491	13716
Exhibit 1071–1072	60495	13717
Exhibit 1073B	60496	13718
Exhibit 1074–1075	60499	13719
Exhibit 1077–1088	60502	13720
Exhibit 1089–1092	60514	13728
Exhibit 1094–1103	60519	13730
Exhibit 1103a	60529	13737
Exhibit 1104–1105	60530	13738
Exhibit 1107–1111	60533	13739
Exhibit 1112	60538	13743
Exhibit 1113–1114	65040	13744
Exhibit 1115	60542	13745
Exhibit 1116–1117	60548	13752
Exhibit 1118	60550	13753
Exhibit 1119	60552	13755
Exhibit 1120	60553	13755
Exhibit 1124	60562	13759
Exhibit 1126	60564	13760
Exhibit 1127	60565	13760B
Exhibit 1129	60567	13761
Exhibit 1133	60571	13761
Exhibit 1134	60572	13762
Exhibit 1135	60573	13763
Exhibit 1135A	60574	13765
Exhibit 1139	60580	13766A
Exhibit 1141	60582	13767
Exhibit 1142	60583	13768A
Exhibit 1147	60589	13768C
Exhibit 1151	60594	13769
Exhibit 1152	60595	13769
Exhibit 1153–1155	60597	13771
Exhibit 1157	60602	13774
Exhibit 1158	60605	13777
Exhibit 1159	60606	13778
Exhibit 1160	60609	13781
Exhibit 1161–1166	60610	13782
Exhibit 1167	60616	13786
Exhibit 1168	60618	13787

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1171–1173	60621	13788
Exhibit 1174	60624	13790
Exhibit 1175	60626	13791
Exhibit 1176–1178	60628	13792
Exhibit 1179	60631	13794
Exhibit 1180–1183	60635	13796
Exhibit 1184	60639	13798
Exhibit 1185	60641	13800
Exhibit 1193–1195	60650	13801
Exhibit 1197	60654	13803
Exhibit 1198–1200	60656	13804
Exhibit 1201	60659	13806
Exhibit 1203–1204	60662	13806C
Exhibit 1207	60665	13807
Exhibit 1208	60667	13808
Exhibit 1210–1211	60668	13808
Exhibit 1213–1215	60671	13810
Exhibit 1216	60674	13811
Exhibit 1217	60676	13813
Exhibit 1220	60680	13813
Exhibit 1223	60684	13814
Exhibit 1227–1228	60688	13815
Exhibit 1230	60691	13816A
Exhibit 1231	60692	13816B
Exhibit 1232	60695	13817
Exhibit 1234	60697	13817
Exhibit 1235	60698	13818
Exhibit 1237	60703	13816C
Exhibit 1239	60705	13820
Exhibit 1241	60707	13821
Exhibit 1242	60708	13822
Exhibit 1243–1245	60710	13823
Exhibit 1246	60713	13825
Exhibit 1247	60715	13828
Exhibit 1248	60716	13829
Exhibit 1249	60718	13830
Exhibit 1250	60720	13831
Exhibit 1251	60721	13832
Exhibit 1252	60726	13835
Exhibit 1253	60727	13836
Exhibit 1254	60729	13837
Exhibit 1255	60731	13839
Exhibit 1256	60732	13840
Exhibit 1258	60735	13842
Exhibit 1259	60737	13843
Exhibit 1262	60742	13844
Exhibit 1263	60743	13845
Exhibit 1264–1265	60746	13848
Exhibit 1266	60748	13850

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1267	60750	13852
Exhibit 1268	60754	13856
Exhibit 1269	60756	13858
Exhibit 1270	60759	13861
Exhibit 1271	60765	13866
Exhibit 1272	60766	13867
Exhibit 1273–1276	60769	13870
Exhibit 1277	60773	13871
Exhibit 1279	60775	13872
Exhibit 1280	60777	13873
Exhibit 1281	60778	13874
Exhibit 1286	60784	13876
Exhibit 1287	60785	13877
Exhibit 1288	60788	13878
Exhibit 1289	60789	13879
Exhibit 1290–1291	60792	13880
Exhibit 1292	60794	13881
Exhibit 1293	60796	13883
Exhibit 1294–1295	60799	13885
Exhibit 1297	60802	13887
Exhibit 1298	60803	13888
Exhibit 1299–1305	60805	13890
Exhibit 1306–1309	60812	13897
Exhibit 1310	60816	13900
Exhibit 1311	60818	13900C
Exhibit 1313–1321	60820	13900D
Exhibit 1322	60829	13907
Exhibit 1323–1327	60831	13908
Exhibit 1337–1338	60850	13911
Exhibit 1339	60852	13912
Exhibit 1340	60857	13917
Exhibit 1344	60862	13918
Exhibit 1345–1352	60865	13920
Exhibit 1353	60873	13926
Exhibit 1354	60875	13927
Exhibit 1355–1356	60877	13928
Exhibit 1357	60879	13931
Exhibit 1358	60881	13932
Exhibit 1360–1362	60883	13933
Exhibit 1363	60886	13935
Exhibit 1364	60888	13937
Exhibit 1366–1369	60895	13942
Exhibit 1371	60900	13946
Exhibit 1371A	60901	13947
Exhibit 1372–1372A	60902	13948
Exhibit 1373–1374	60904	13949
Exhibit 1375	60906	13951
Exhibit 1376–1380	60908	13953
Exhibit 1381	60913	13959

VOL. XXII

EXHIBITS

tters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)

	Original	Print
Exhibit 1382	60915	13961
Exhibit 1383–1384	60922	13968
Exhibit 1386	60925	13970
Exhibit 1388–1389	60929	13973
Exhibit 1487	60931	13975
Exhibit 1488	60932	13977
Exhibit 1490	60936	13979
Exhibit 1491	60938	13982
Exhibit 1492–1494	60940	13984
Exhibit 1495	60943	13986
Exhibit 1496	60945	13988
Exhibit 1497	60946	13989
Exhibit 1498	60948	13991
Exhibit 1499	60950	13993
Exhibit 1500	60956	13997
Exhibit 1501	60958	13998A
Exhibit 1504	60962	13999
Exhibit 1505–1507	60964	14000
Exhibit 1508	60968	14003
Exhibit 1509	60971	14006
Exhibit 1510	60973	14008
Exhibit 1512	60976	14010
Exhibit 1513	60979	14013
Exhibit 1520–1521	60996	14018
Exhibit 1522	60998	14019
Exhibit 1523	61000	14020
Exhibit 1524	61002	14022
Exhibit 1526	61007	14024
Exhibit 1527	61009	14026
Exhibit 1528	61013	14027
Exhibit 1529	61018	14030
Exhibit 1530	61021	14033
Exhibit 1531	61022	14034
Exhibit 1537	61033	14039
Exhibit 1538	61034	14040
Exhibit 1539	61038	14041
Exhibit 1540	61040	14042
Exhibit 1542	61041	14043
Exhibit 1543	61043	14043
Exhibit 1545	61045	14046
Exhibit 1546	61048	14048
Exhibit 1547	61050	14050
Exhibit 1548	61052	14052
Exhibit 1549	61053	14052
Exhibit 1550	61054	14053
Exhibit 1551	61056	14054
Exhibit 1609	61057	14055

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1610	61064	14059
Exhibit 1640	61067	14060
Exhibit 1641	61069	14062
Exhibit 1642–1644	61073	14065
Exhibit 1648	61082	14067
Exhibit 1650	61084	14068
Exhibit 1651	61086	14069
Exhibit 1651a	61088	14071
Exhibit 1651b	61090	14073
Exhibit 1652	61091	14074
Exhibit 1653	61092	14075
Exhibit 1654	61094	14076
Exhibit 1655–1656	61096	14078
Exhibit 1657	61098	14080
Exhibit 1658	61100	14082
Exhibit 1659	61102	14084
Exhibit 1661	61110	14091
Exhibit 1662	61113	14094
Exhibit 1666	61125	14095
Exhibit 1667	61127	14097
Exhibit 1674	61141	14098
Exhibit 1675	61143	14100
Exhibit 1676	61145	14101
Exhibit 1677	61146	14101
Exhibit 1678	61148	14103
Exhibit 1679	61159	14111
Exhibit 1681–1684	61167	14116
Exhibit 1690	61171	14119
Exhibit 1691	61177	14125
Exhibit 1693–1696	61180	14127
Exhibit 1698–1699	61185	14129
Exhibit 1703	61190	14131
Exhibit 1705	61192	14131
Exhibit 1707	61194	14132
Exhibit 1709	61196	14133
Exhibit 1710	61197	14133
Exhibit 1712	61205	14134
Exhibit 1713	61206	14135
Exhibit 1714	61209	14137
Exhibit 1715	61211	14138
Exhibit 1716	61212	14139
Exhibit 1717	61226	14153
Exhibit 1719–1720	61228	14154
Exhibit 1721	61230	14155
Exhibit 1722	61232	14156
Exhibit 1723	61234	14157
Exhibit 1724	61235	14158
Exhibit 1726–1728	61238	14159

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1729	61241	14160B
Exhibit 1730	61242	14160C
Exhibit 1731	61243	14161
Exhibit 1731A	61259	14174
Exhibit 1731B	61270	14185
Exhibit 1731C	61285	14200
Exhibit 1732	61288	14203
Exhibit 1733	61295	14207
Exhibit 1734	61300	14210
Exhibit 1735	61302	14211
Exhibit 1736	61304	14212
Exhibit 1737	41306	14213
Exhibit 1738	61308	14214
Exhibit 1739	61310	14215
Exhibit 1740	61313	14218
Exhibit 1741	61317	14221
Exhibit 1742	61319	14222
Exhibit 1745	61320	14223
Exhibit 1746	61321	14224
Exhibit 1747	61326	14228
Exhibit 1748	61329	14231
Exhibit 1749	61330	14231
Exhibit 1750	61332	14233
Exhibit 1751	61334	14234
Exhibit 1752	61335	14235
Exhibit 1753	61339	14238
Exhibit 1754–1757	61342	14240
Exhibit 1758	61346	14243
Exhibit 1759	61348	14244
Exhibit 1760	61350	14245
Exhibit 1761	61353	14247
Exhibit 1763	61355	14248
Exhibit 1764	61361	14253
Exhibit 1768	61364	14256
Exhibit 1770	61366	14256C
Exhibit 1771	61368	14257
Exhibit 1772	61369	14258
Exhibit 1773	61378	14265
Exhibit 1778	61388	14266
Exhibit 1779	61391	14268
Exhibit 1780	61403	14281
Exhibit 1781	61418	14291
Exhibit 1781a	61419	14291
Exhibit 1782	61421	14293
Exhibit 1783	61423	14294
Exhibit 1784	61426	14294D
Exhibit 1785	61427	14295
Exhibit 1786	61432	14296
Exhibit 1787	61436	14301

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1790	61442	14304
Exhibit 1791	61446	14307
Exhibit 1798	61458	14309
Exhibit 1799	61461	14311
Exhibit 1800	61464	14313
Exhibit 1802	61468	14316
Exhibit 1803	61469	14317
Exhibit 1804	61474	14320
Exhibit 1805	61476	14321
Exhibit 1806	61478	14323
Exhibit 1807	61480	14324
Exhibit 1808	61482	14326
Exhibit 1809	61484	14328

VOL. XXIII

EXHIBITS

Exhibit 1810	61502	14347
Exhibit 1811	61503	14347
Exhibit 1812	61505	14348
Exhibit 1812a	61506	14348
Exhibit 1813	61507	14348A
Exhibit 1813A	61508	14348B
Exhibit 1816	61509	14348C
Exhibit 1818	61510	14349
Exhibit 1819	61512	14350
Exhibit 1820	61513	14350
Exhibit 1823–1823A	61516	14352AB
Exhibit 1824, A, B, C	61518	14353
Exhibit 1826	61524	14355
Exhibit 1827	61525	14355
Exhibit 1830–1831	61529	14356
Exhibit 1832	61531	14358
Exhibit 1833	61533	14359
Exhibit 1834	61536	14362
Exhibit 1835	61537	14363
Exhibit 1836	61539	14364
Exhibit 1837	61540	14365
Exhibit 1838	61541	14366
Exhibit 1839	61544	14367
Exhibit 1840	61548	14370
Exhibit 1841	61553	14370
Exhibit 1842	61554	14371
Exhibit 1843	61556	14372
Exhibit 1844	61557	14373
Exhibit 1845–1846	61559	14374
Exhibit 1847	61561	14376
Exhibit 1848	61563	14377
Exhibit 1849	61565	14378
Exhibit 1851	61566	14379

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1852	61567	14380
Exhibit 1853	61570	14381
Exhibit 1855	61574	14382
Exhibit 1856	61576	14383
Exhibit 1857	61578	14385
Exhibit 1859	61580	14385
Exhibit 1860	61582	14388
Exhibit 1861	61588	14394
Exhibit 1863	61590	14397
Exhibit 1868	61605	14403
Exhibit 1869	61607	14404
Exhibit 1870	61610	14406
Exhibit 1871	61614	14407
Exhibit 1872	61616	14408
Exhibit 1873	61619	14410
Exhibit 1874	61627	14414
Exhibit 1875	61634	14418
Exhibit 1876	61639	14422
Exhibit 1877	61640	14423
Exhibit 1878	61642	14424
Exhibit 1879	61647	14427
Exhibit 1880	61651	14430
Exhibit 1881A	61658	14433
Exhibit 1883	61662	14436
Exhibit 1884	61664	14436C
Exhibit 1889	61665	14437
Exhibit 1891	61669	14438
Exhibit 1892	61671	14439
Exhibit 1904	61677	14441
Exhibit 1905	61682	14444
Exhibit 1906	61684	14445
Exhibit 1908	61688	14448
Exhibit 1909	61697	14454
Exhibit 1910	61703	14459
Exhibit 1911	61708	14465
Exhibit 1912–1914	61712	14468
Exhibit 1918	61721	14470
Exhibit 1919	61732	14471
Exhibit 1920	61734	14475
Exhibit 1921–1923	61736	14476
Exhibit 1925	61740	14480
Exhibit 1926	61749	14489
Exhibit 1927	61751	14491
Exhibit 1928	61752	14492
Exhibit 1929	61754	14495
Exhibit 1930	61760	14499
Exhibit 1931	61762	14500
Exhibit 1933	61766	14501
Exhibit 1935–1937	61770	14502
Exhibit 1940	61776	14505
Exhibit 1941	61784	14512

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 1942	61786	14513
Exhibit 1946	61795	14520
Exhibit 1948	61796	14520B
Exhibit 1949	61797	14521
Exhibit 1950	61798	14521
Exhibit 1951–1953	61801	14524
Exhibit 1954	61804	14527
Exhibit 1955	61806	14528
Exhibit 1956	61817	14532
Exhibit 1957	61818	14532B
Exhibit 1958	61820	14532D
Exhibit 1959	61821	14533
Exhibit 1960	61824	14534
Exhibit 1961	61826	14534C
Exhibit 1962	61828	14535
Exhibit 1964	61833	14536
Exhibit 1965	61835	14537
Exhibit 1966	61838	14540
Exhibit 1968	61842	14541
Exhibit 1969	61845	14543
Exhibit 1971	61850	14546
Exhibit 1972	61854	14551
Exhibit 1974	61857	14553
Exhibit 1975	61859	14555
Exhibit 1976	61860	14556
Exhibit 1977–1980	61863	14559
Exhibit 1981	61867	14561
Exhibit 1982	61883	14567
Exhibit 1983	61884	14568
Exhibit 1984	61885	14569
Exhibit 1985	61904	14582
Exhibit 1986	61905	14583
Exhibit 1987	61910	14588
Exhibit 1988	61912	14590
Exhibit 1989	61914	14592
Exhibit 1993	61923	14601
Exhibit 1994	61928	14607
Exhibit 1995	61935	14610
Exhibit 1996	61936	14611
Exhibit 1997	61940	14614
Exhibit 1998	61943	14615
Exhibit 1999	61944	14615
Exhibit 2000	61953	14625
Exhibit 2001	61960	14631
Exhibit 2005	61962	14633
Exhibit 2006	61964	14634
Exhibit 2007	61965	14635
Exhibit 2009–2011	61987	14657

VOL. XXIV

EXHIBITS

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit 2012	61990	14659
Exhibit 2013	61991	14660
Exhibit 2022	62019	14667
Exhibit 2029	62085	14669
Exhibit 2030	62087	14671
Exhibit H-5001	62044	14675
Exhibit H-5004	62062	14686
Exhibit H-5005	62088	14693
Exhibit H-5006	62089	14694
Exhibit H-5007	62095	14701
Exhibit H-5008	62097	14702
Exhibit H-5009	62106	14707
Exhibit H-5010	62105	14709
Exhibit H-5011	62107	14711
Exhibit H-5014	62110	14714
Exhibit H-5017	62111	14715
Exhibit H-5018	62112	14716
Exhibit H-5019	62115	14719
Exhibit H-5020	62116	14720
Exhibit H-5021	62118	14723
Exhibit H-5022	62119	14724
Exhibit H-5023	62123	14727
Exhibit H-5025	62126	14731
Exhibit B-5036	62131	14736
Exhibit O-5041	62136	14736B
Exhibit O-5042–O-5045	62138	14737
Exhibit O-5046	62142	14740
Exhibit O-5047	62144	14741
Exhibit C-5048	62146	14742
Exhibit C-5049	62149	14745
Exhibit C-5050	62153	14749
Exhibit C 5051	62154	14750
Exhibit C 5052	62155	14750B
Exhibit H 5059	62166	14750C
Exhibit H 5060	62167	14750D
Exhibit H-5061	62168	14751
Exhibit H-5065–H-5067	62174	14752
Exhibit H-5070	62196	14754
Exhibit H 5071	62198	14756
Exhibit O-5072	62199	14757
Exhibit HA5073	62200	14758
Exhibit H.A.5074A	62201	14758
Exhibit HA 5074B	62208	14763
Exhibit HA 5074C	62210	14764
Exhibit H.A. 5075A	62211	14766

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit HA 5075 B	62212	14767
Exhibit H. A. 5075 C	62213	14767
Exhibit H. A. 5075 D	62214	14768
Exhibit H. A. 5076 A	62215	14768
Exhibit H. A. 5077	62216	14769
Exhibit H. A. 5078	62267	14804
Exhibit H. A. 5081	62274	14805
Exhibit H. A. 5082	62276	14806
Exhibit H. A. 5084	62277	14806
Exhibit H. A. 5085	62283	14810
Exhibit H. A. 5086	62285	14812
Exhibit H. A. 5087	62286	14812
Exhibit H. A. 5110	62299	14815
Exhibit H 5111	62301	14817
Exhibit H 5112	62302	14818
Exhibit H 5113–H 5114	62304	14820
Exhibit AH5116–A.H. 5119	62306	14821
Exhibit AH5122	62310	14825
Exhibit A.H.-5123	62311	14826
Exhibit A.H. 5124–A.H. 5126	62313	14828
Exhibit H.E. 5130	62318	14833
Exhibit HE-5135	62324	14837
Exhibit HE-5136	62326	14839
Exhibit HE-5137	62328	14841
Exhibit H-5138	62329	14842
Exhibit HE5141–H. E. 5143	62339	14849
Exhibit H. E. 5146	62345	14850B
Exhibit H-5151	62350	14850C
Exhibit H. E. 5152	62351	14851
Exhibit H. E. 5155–H. E. 5156	62366	14861
Exhibit H. E. 5160	62381	14862
Exhibit H. E. 5168	62390	14863
Exhibit H. E. 5178	62402	14864
Exhibit H. E. 5181	62405	14865
Exhibit H. E. 5184	62408	14866
Exhibit H. E. 5185	62409	14866B
Exhibit H. E. 5186	62411	14866D
Exhibit G. C. A. 5189	62412	14867
Exhibit H. 5193	62425	14878
Exhibit H. 5195	62427	14878B
Exhibit H. 5197–H-5200	62428	14878C
Exhibit H.E. 5201	62432	14880A
Exhibit HE-5202–H. E. 5203	62434	14881
Exhibit H. E. 5204	62436	14881
Exhibit H. E. 5205	62438	14883
Exhibit H.E. 5206–H.E. 5207	62440	14884
Exhibit H-5317	62442	14886
Exhibit H-5318	62445	14889

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5219	62448	14892
Exhibit H-5223	62450	14894
Exhibit H-5229	62463	14907
Exhibit H-5236	62470	14913
Exhibit H-5237	62473	14916
Exhibit H5238	62480	14923
Exhibit H 5239	62483	14927
Exhibit H5240	62494	14933
Exhibit H-5241	62497	14934

VOL. XXV

EXHIBITS

Exhibit H-5242	62499	14936
Exhibit H-5243	62505	14941
Exhibit H-5243A	62507	14943
Exhibit H-5244	62508	14944
Exhibit H-5245	62510	14946
Exhibit H-5246	62512	14948
Exhibit H-5247	62513	14949
Exhibit H-5248	62514	14950
Exhibit H-5289	62518	14954
Exhibit H-5290	62519	14955
Exhibit H-5291	62521	14957
Exhibit H-5292	62524	14960
Exhibit H-5293	62527	14963
Exhibit H-5294	62533	14969
Exhibit GCA-5295	62536	14971
Exhibit GCA-5296	62538	14973
Exhibit H-5297	62539	14974
Exhibit H-5298	62540	14975
Exhibit H-5299	62542	14977
Exhibit H-5300	62544	14979
Exhibit H-5301	62545	14981
Exhibit H-5302	62547	14982A
Exhibit H-5304	62548	14982B
Exhibit H-5305	62549	14983
Exhibit AH-5305	62551	14984
Exhibit H-5307	62561	14990
Exhibit AH-5308-5310	62574	14994
Exhibit AH-5311	62577	14996
Exhibit AH-5313	62581	14999
Exhibit AH-5314	62582	14999
Exhibit AH-5315	62589	15002
Exhibit H-5316	62596	15005
Exhibit H-5317	62632A	15006

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5318	62678	15012
Exhibit H-5319	62722	15015
Exhibit H-5320	62768	15018
Exhibit H-5322	62770	15020
Exhibit H-5323	62775	15025
Exhibit H-5324	62776	15025
Exhibit H-5325	62778	15027
Exhibit H-5329	62786	15028
Exhibit H-5330	62790	15032A
Exhibit H-5341–H-5342	62798	15032B
Exhibit H-5345	62802	15033
Exhibit H-5346	62808	15034
Exhibit H-5347	62821	15041
Exhibit H-5348	62836	15050A
Exhibit H-5349	62837	15050B
Exhibit H-5350–H-5352	62838	15050C
Exhibit H-5353	62841	15052
Exhibit H-5354	62847	15056
Exhibit H-5357	62852	15059
Exhibit H-5360	62854	15060
Exhibit H-5361	62855	15061
Exhibit H-5361A	62869	15069
Exhibit O-5366	62870	15070
Exhibit O-5367	62871	15071
Exhibit O-5368	62872	15072
Exhibit O-5369	62873	15073
Exhibit O-5370	62874	15074
Exhibit O-5371–O-5372	62875	15075
Exhibit H-5375	62877	15077
Exhibit H-5376	62879	15078
Exhibit H-5377	62882	15081
Exhibit O-5381–O-5383	62884	15082
Exhibit H-5384–H-5385	62887	15085
Exhibit H-5393	62889	15087
Exhibit H-5396	62894	15088
Exhibit H-5397	62899	15093
Exhibit H-5398	62900	15095
Exhibit H-5399	62929	15115
Exhibit H-5402	62954	15117
Exhibit H-5405	62956	15118
Exhibit H-5406	62960	15122
Exhibit H-5407	62964	15127
Exhibit H-5408	62965	15127
Exhibit H-5409	62967	15129
Exhibit H-5410	62970	15132
Exhibit H-5411–H-5412	62977	15139
Exhibit H-5413	62979	15141
Exhibit H-5414	62988	15147
Exhibit H-5416	62991	15149

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5417	62995	15153
Exhibit H-5418	62997	15155
Exhibit H-5422	63004	15158
Exhibit H-5423	63006	15162

VOL. XXVI

EXHIBITS

Exhibit H-5428	63010	15165
Exhibit H-5430–H-5431	63022	15168
Exhibit H-5432	63024	15170
Exhibit H-5433	63027	15173
Exhibit H-5434	63029	15175
Exhibit H-5435	63036	15182
Exhibit H-5436	63038	15184
Exhibit H-5437	63040	15186
Exhibit H-5438–H-5439	63043	15189
Exhibit H-5440	63045	15191
Exhibit H-5441–H-5443	63047	15193
Exhibit H-5445	63050	15196
Exhibit H-5446–H-5448	63052	15198
Exhibit H-5449	63055	15201
Exhibit H-5458	63057	15203
Exhibit H-5459	63058	15204
Exhibit H-5460–H-5461	63063	15209
Exhibit H-5464	63067	15211
Exhibit H-5465	63070	15214
Exhibit H-5466	63072	15216
Exhibit H-5467–H-5469	63074	15218
Exhibit H-5473	63078	15221
Exhibit H-5474	63079	15222
Exhibit H-5475	63081	15224
Exhibit H-5477	63085	15226
Exhibit H-5478	63087	15228
Exhibit H-5479	63088	15229
Exhibit H-5480	63091	15232
Exhibit H-5481	63092	15233
Exhibit H-5483	63099	15240
Exhibit H-5484	63103	15244
Exhibit H-5490	63128	15247
Exhibit H-5494	63133	15250
Exhibit H-5496	63137	15252
Exhibit H-5498	63140	15253
Exhibit H-5499	63142	15255
Exhibit H-5502	63147	15256
Exhibit H-5508	63161	15258
Exhibit H-5513	63167	15259
Exhibit H-5515	63174	15266

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5516	63177	15266
Exhibit H-5519	63180	15269
Exhibit H-5520	63183	15271
Exhibit H-5523	63198	15273
Exhibit H-5524	63202	15277
Exhibit H-5526	63204	15279
Exhibit C-5530	63206	15281
Exhibit C-5531	63216	15288
Exhibit C-5532	63217	15289
Exhibit C-5533–C-5537	63224	15294
Exhibit C-5540	63231	15299
Exhibit H-5548	63234	15300
Exhibit H-5550	63237	15301
Exhibit H-5551	63238	15303
Exhibit H-5553	63242	15306
Exhibit H-5631	63260	15306A
Exhibit H-5632	63264	15309
Exhibit H-5633	63267	15311
Exhibit H-5636	63269	15312
Exhibit H-5637	63272	15314
Exhibit H-5639	63284	15317
Exhibit H-5645–H-5647	63306	15320
Exhibit H-5648	63309	15323
Exhibit H-5649	63313	15327
Exhibit C-5651	63357	15355
Exhibit C-5652	63358	15355
Exhibit C-5653	63360	15357
Exhibit C-5654	63362	15359
Exhibit C-5656	63365	15360
Exhibit C-5658	63366	15360A
Exhibit C-5659	63367	15361
Exhibit C-5660	63369	15362
Exhibit C-5661	63377	15366A
Exhibit C-5662	63379	15367
Exhibit C-5663	63385	15369
Exhibit C-5664	63387	15371
Exhibit C-5665	63390	15372
Exhibit C-5666	63394	15374
Exhibit C-5667	63397	15378
Exhibit C-5668	63408	15389
Exhibit C-5669–C-5670	63429	15410
Exhibit C-5675	63431	15412
Exhibit H-5684–H-5685	63433	15413
Exhibit H-5692	63436	15415
Exhibit H-5700	63442	15415
Exhibit H-5708	63454	15417
Exhibit H-5719	63468	15419
Exhibit H-5720	63470	15421
Exhibit H-5726	63481	15422
Exhibit H-5741	63506	15424

VOL. XXVII

EXHIBITS

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5742	63508	15427
Exhibit H-5743	63510	15428
Exhibit H-5745	63514	15432A
Exhibit H-5747	63518	15432C
Exhibit H-5749	63522	15435
Exhibit H-5750	63523	15436
Exhibit H-5799	63538	15451
Exhibit H-5800	63539	15452
Exhibit H-5801–H-5803	63541	15454
Exhibit H-5803A	63544	15456
Exhibit H-5804–H-5409	63545	15457
Exhibit H-5811–H-5826	63551	15463
Exhibit H-5827	64567	15479
Exhibit H-5834	63569	15480
Exhibit H-5835	63570	15481
Exhibit H-5841	63582	15485
Exhibit H-5843	63592	15491
Exhibit H-5844	63593	15492
Exhibit H-5845	63595	15494
Exhibit H-5847	63597	15496
Exhibit H-5849A	63598	15497
Exhibit H-5849B	63606	15505
Exhibit H-5851	63609	15507
Exhibit H-5856a	63616	15509
Exhibit H-5856b	63618	15511
Exhibit H-5861–H-5862	63630	15512
Exhibit H-5863	63632	15514
Exhibit H-5865	63638	15517
Exhibit H-5873	63645	15521
Exhibit H-5874	63646	15521
Exhibit H-5875	63648	15523
Exhibit H-5876	63650	15524
Exhibit H-5878	63655	15527
Exhibit H-5879	63666	15535
Exhibit H-5880	63671	15536
Exhibit H-5881	63677	15542
Exhibit H-5882	63678	15543
Exhibit H-5883	63681	15546
Exhibit H-5886	63685	15547
Exhibit H-5887	63697	15552
Exhibit H-5888	63751	15589
Exhibit H-5889–H-5891	63753	15590A
Exhibit H-5893	63758	15592B
Exhibit H-5896	63761	15593
Exhibit H-5897	63762	15593
Exhibit H-5898	63765	15595
Exhibit H-5903	63776	15599

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit H-5904	63777	15600
Exhibit H-5905	63778	15600
Exhibit H-5906–H-5909	63780	15602A
Exhibit H-5910	63784	15603
Exhibit H-5913	63788	15605
Exhibit H-5914	63794	15609
Exhibit H-5936–H-5937	63799	15612
Exhibit O-5940	63801	15613
Exhibit O-5942	63802	15614
Exhibit O-5945	63804	15615
Exhibit O-5946	63810	15618
Exhibit O-5947	63826	15634
Exhibit H-5949	63840	15639
Exhibit H-5950	63863	15654
Exhibit H-5951	63897	15678
Exhibit O-5954–O-5957	63933	16005
Exhibit O-5958	63937	16009
Exhibit O-5959–O-5970	63938	16010
Exhibit O-5971	63950	16022
Exhibit O-5972–O-5976	63951	16023
Exhibit O-5978	63957	16028

VOL. XXVIII

EXHIBITS

Exhibit O-5979	63958	16029
Exhibit O-5981	63965	16037
Exhibit O-5982	63970	16042
Exhibit O-5983	63963	16052
Exhibit O-5984	63984	16053
Exhibit O-5986	63992	16058
Exhibit O-5987	63993	16059
Exhibit O-5988	63994	16060A
Exhibit O-5993	63999	16060B
Exhibit O-5994	64000	16060C
Exhibit O-5999	64001	16061
Exhibit O-6000	64007	16068
Exhibit O-6001	64014	16075
Exhibit O-6002	64016	16076
Exhibit O-6003	64018	16077
Exhibit O-6006	64020	16079
Exhibit O-6007	64024	16082
Exhibit O-6008	64030	16088
Exhibit O-6009	64037	16095
Exhibit O-6010	64045	16103
Exhibit O-6011	64052	16110
Exhibit O-6012	64058	16116
Exhibit O-6013	64067	16125
Exhibit O-6014	64074	16132

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit O-6024–O-6025	64067	16143
Exhibit O-6026	64089	16144
Exhibit O-6027	64096	16145
Exhibit O-6028	64104	16153
Exhibit O-6029	64112	16157
Exhibit O-6030	64112	16158
Exhibit O-6031	64125	16164
Exhibit O-6032–O-6033	64126	16165
Exhibit O-6036	64196	16166
Exhibit H-6048	64197	16166
Exhibit H-6049	64201	16170A
Exhibit H-6050	64202	16170B
Exhibit H-6051	64203	16170C
Exhibit H-6052	64205	16171
Exhibit H-6053	64207	16173
Exhibit H-6054	64209	16174
Exhibit H-6055	64211	16176
Exhibit O-6056	64213	16177
Exhibit O-6057	64215	16178
Exhibit O-6058	64229	16184
Exhibit O-6060	64272	16190
Exhibit O-6061	64273	16191
Exhibit O-6062	64282	16196
Exhibit O-6063	64285	16198
Exhibit O-6065–O-6067	64292	16202A
Exhibit H-6069–H-6070	64302	16204A
Exhibit H-6071	64304	16205
Exhibit H-6072–H-6073	64306	16206
Exhibit H-6074	64308	16207
Exhibit H-6075	64310	16208
Exhibit O-6076A	64311	16209
Exhibit O-6076B	64313	16210
Exhibit O-6076C	64314	16211
Exhibit O-6076D	64317	16212
Exhibit O-6076E	64318	16213
Exhibit O-6076F	64320	16214
Exhibit O-6076G	64321	16215
Exhibit O-6076H	64323	16217
Exhibit O-6076I	64324	16218
Exhibit O-6076J	64326	16220
Exhibit O-6076K	64329	16223
Exhibit O-6076L	64331	16224
Exhibit O-6076M	64332	16225
Exhibit O-6076N	64333	16226
Exhibit O-6076O	64335	16228
Exhibit O-6076R	64336	16229
Exhibit O-6076Q	64339	16233
Exhibit B-6077A to E	64342	16236
Exhibit B-6079–B-6080	64347	16241

EXHIBITS—Continued

Letters, etc.—Continued. (For description, see p. 79 et seq. of this volume.)	Original	Print
Exhibit GCA-6082-6092	64350	16242A
Exhibit B-6094	64361	16253
Exhibit H-6112	64362	16255
Exhibit H-6113	64364	16256
Exhibit H-6114	64380	16272
Exhibit H-6116	64384	16274
Exhibit H-6117	64387	16276
Exhibit H-6153-H-6154	64391	16278
Exhibit H-6158	64403	16279
Exhibit H-6160	64420	16288
Exhibit H-6162	64455	16299
Exhibit H-6163	64472	16315
Exhibit H-6167	64544	16361
Exhibit H-6168	64563	16376
Exhibit H-6169	64676	16470
Exhibit H-6170	64678	16470
Exhibit H-6171	64681	16472
Exhibit H-6172	64686	16475
Exhibit O-6178	64687	16476
Exhibit O-6180	64688	16476
Exhibit O-6181	64689	16477
Exhibit O-6185	64690	16477
Exhibit O-6187	64691	16477
Exhibit H-6191-H-6212	64700	16479

Notice of and motion to extend time to file record (omitted in printing)	64725	
Stipulation as to record	64736	16501
Order as to record	64739	16503
Praecipe for transcript of record	64741	16505
Order extending time to file record	64754	16515
Counter praecipe for transcript of record	64755	16516
Stipulation re certain exhibits	64759	16516
Order re certain exhibits	64761	16518
Notice of and motion to extend time to file record (omitted in printing)	64762	
Order extending time to file record	64771	16519
Docket entries (omitted in printing)	64774	
List of exhibits (Printed in Index Volume)	64793	
Clerk's certificate (omitted in printing)	64964	
Statements of points to be relied upon	64965	16519
Appellants' joint designation of portions of record to be printed (omitted in printing)	64985 (1-126)	
Appellee's designation of additional portions of record to be printed (omitted in printing)	64986 (1-28)	
Amendment to appellant's joint designation (omitted in printing)	64987 (1-12)	
Stipulation as to record	64990	16530
Order noting probable jurisdiction	64993	16532

LIST OF EXHIBITS INCLUDING THOSE NOT PRINTED

Exhibit Number	Date	Description	Original	Print
1	6/30/16	Contract, Empire Machine Co. and Hartford-Fairmont Co....	16462	8595
2	12/19/16	Memo, F. G. Smith to Honiss....	58569	12367
3	2/ 8/17	Telegram, Honiss to Hartford-Fairmont Co.....	58570	12368
4	2/ 9/17	Telegram, F. G. Smith to Honiss.	58571	12368
5	3/ 6/17	Letter, Honiss to Empire Machine Co.....	58572	12369
6	1/30/19	Memo by F. G. Smith.....	58573	12369
7	8/ 8/19	Report by F. G. Smith.....	58575	12371
8	10/ 4/19	Letter, Honiss to F. G. Smith....	58584	12380
9	3/16/20	Memo by F. G. Smith.....	58585	12381
10	3/17/20	Letter, Honiss to F. G. Smith....	58587	12382
11	4/ 9/20	Letter, F. G. Smith to Honiss...	58591	12386A
12	2/19/20	Letter, F. G. Smith to Honiss....	58592	12386B
13	4/15/20	Letter, Honiss to F. G. Smith....	58593	12387
14	5/19/20	Letter, F. G. Smith to Cunningham	58594	12388
15	2/21/21	Letter, H. K. Smith to Sayles....	58596	12389
16	10/6/22	Contract—Agreement for Formation of Hartford-Empire Co. between Hartford-Fairmont Co., Empire Machine Co. et al.....	51308	11943
17	2/13/22	Letter, Falck to F. G. Smith.....	58601	12395
18	2/21/22	Letter, H. K. Smith to Falck....	58602	
19	10/6/22	Contract—Agreement Relating to Patent Rights and Formulas between Corning Glass Works, Hartford-Fairmont Co., Empire Machine Co. and Hartford-Empire Co.....	16476	8606A
20	2/13/22	Memo by F. G. Smith.....	58605	12396
21	2/15/21	Letter, F. G. Smith to Ashcraft..	58608	12398
22	11/10/21	Memo by H. K. Smith.....	58610	12400
23	12/23/21	Memo by H. K. Smith.....	58618	12406
24	1/24/22	Report by F. G. Smith.....	58627	12412
25	12/20/21	Memo by H. K. Smith.....	58633	12416
26	1/17/22	Memo by H. K. Smith.....	58642	12422
27	1/ 9/22	Memo by Owens Co.....	58656	12432
28	12/23/21	Letter, H. K. Smith to Blair.....	58666	
29	12/27/21	Letter, Blair to H. K. Smith.....	58667	12438
30	3/ 3/22	Memo by H. K. Smith.....	58669	12439
31	4/ 5/22	Memo by H. K. Smith.....	58675	12442
32	4/21/22	Memo by H. K. Smith.....	58684	12448
33	4/13/22	Memo by H. K. Smith.....	58690	12452

Exhibit Number	Date	Description	Original	Print
34	4/22/22	Letter, H. K. Smith to Blair.....	58695	12455
35	4/21/22	Memo, unsigned.....	58697	12457
36	4/28/22	Memo by H. K. Smith.....	58703	12459
37	4/27/22	Memo by H. K. Smith.....	58707	12462
38	4/29/22	Letter, H. K. Smith to Blair.....	58723	
39	5/15/22	Memo by Blair and Biggers.....	58724	12469
40	5/17/22	Letter, H. K. Smith to Blair.....	58725	12471
41	5/26/22	Letter, Blair to H. K. Smith.....	58727	12473
42	6/16/22	Memo by H. K. Smith.....	58730	12477
43	4/27/23	Memo by F. G. Smith.....	58735	12482
44	10/30/22	Memo by H. K. Smith.....	58737	12484
45	1/ 5/23	Letter, F. G. Smith to Ashcraft..	58739	
46	5/ 4/23	Excerpt from diary of H. K. Smith	58740	12486
47	6/17/31	Excerpt from diary of H. K. Smith.....	58742	12487
48	5/10/23	Excerpt from diary of H. K. Smith.....	58767	12515
49	5/14/23	Letter, F. G. Smith to Dorsey....	58769	12516
50	6/25/23	Letter, Dorsey to H. K. Smith...	58771	12517
51	8/ 8/23	Letter, Dorsey to F. G. Smith...	58778	12522
52	1/21/24	Letter, Dorsey to F. G. Smith....	58780	12523
53	2/19/24	Excerpt from diary of H. K. Smith	58785	12527
54	3/24/24	Memo by H. K. Smith.....	58786	12527
55	4/ 9/24	Contract—General License Agreement, Owens Bottle Co., Hartford-Empire Co., et al.....	16507	8629
56	4/ 5/22	Memo by F. G. Smith.....	58790	12531
57	4/12/22	Letter, Dorsey to F. G. Smith....	58792	12533
58	6/23/22	Memo by H. K. Smith.....	58795	12535
59	7/29/22	Letter, F. G. Smith to Dorsey...	58800	12540
60	7/29/22	Letter, F. G. Smith to Dorsey...	58804	12544
61	6/23/22	Contract — Agreement for Purchase of Stock of Howard Automatic Glass Feeder Co., between Beech-Nut Packing Co., Hartford-Fairmont Co., Howard Automatic Glass Feeder Co., et al.....	16573	8665
62	2/21/23	Assignment of Patents and Patent Rights, Howard Automatic Glass Feeder Co. to Hartford-Empire-Co.....	16660	8714
63	6/ 1/26	General Assignment and Power, Howard Automatic Glass Feeder Co. to Hartford-Empire Co....	16661	8715
64	10/26/22	Letter, F. G. Smith to Falck.....	58809	12548
65	1/26/25	Telegram, F. G. Smith to Baker..	58810	12550A

Exhibit Number	Date	Description	Original	Print
66	1/27/25	Telegram, Baker to F. G. Smith..	58811	12550B
67	2/26/25	Memo, Brown to F. G. Smith....	58812	12551
68	9/23/19	Report to F. G. Smith, unsigned.	58813	12552
69	9/23/19	Letter, Peller to F. G. Smith.....	58817	12557
70	6/26/24	Extract from Peller report dated 6/21/23.....	58818	12558
71	8/29/24	Memo, unsigned.....	58820	12560
72	10/16/24	Memo by Heniss.....	58821	12561
73	7/ 9/24	Letter, Williams, to H. K. Smith.	58822	12562
74	8/ 7/25	Memo by F. G. Smith, with notes by H. K. Smith and Williams plus memo by Dorsey.....	58825	12565
75	6/ 1/25	Letter, H. K. Smith to Williams..	58836	12570
76	Undated	Memo by H. K. Smith.....	58837	12570
77	6/ 6/25	Letter, Williams to H. K. Smith, with memo.....	58842	12574
78	8/27/25	Letter, Falck to F. G. Smith.....	58846	12578
79	5/28/25	Memo by F. G. Smith.....	58847	12578
80	8/20/25	Report by H. K. Smith.....	58850	12579
81	7/30/25	License, Miller Glass Eng. Co. to Hartford-Empire Co.....	16665	8716
82	7/30/25	Contract—Sale of Patent Rights, W. J. Miller to Hartford-Empire Co.....	16668	8717
83	7/30/25	Assignment, Miller and Lawrence to Hartford-Empire Co.....	16672	8720B
84	7/30/25	Release, W. J. Miller to Hartford-Empire Co.....	16674	8721
85	7/30/25	Release, W. J. Miller to Owens Bottle Co.....	16675	8721
86	7/30/25	Contract—Limitation of Recovery, between W. J. Miller, Miller Glass Eng. Co., Hartford-Empire Co. and Owens Bottle Co...	16676	8721
87	7/30/25	Contract—Sale of Former Patent Rights, W. J. Miller to V. J. Greene.....	16678	8723
88	7/30/25	Bill of Sale, W. J. Miller to V. J. Greene.....	16686	8725
89	7/30/25	Contract—Assumption of Notes, between V. J. Greene and Hartford-Empire Co.....	16690	8726
90	8/14/25	License, Tucker, Reeves & Beatty to Owens Bottle Co.....	16691	8727
91	8/14/25	Assignment, Tucker, Reeves & Beatty to Hartforrd-Empire Co.	16697	8728

Exhibit Number	Date	Description	Original	Print
92	8/14/25	Release, Owens Bottle Co. and Hartford-Empire Co. to Tucker, Reeves & Beatty	16705	8728
93	8/14/25	Release, Tucker, Reeves & Beatty to Owens Bottle Co	16707	8729
94	8/14/25	Release, Tucker, Reeves & Beatty to Hartford-Empire Co	16710	8731
95	8/14/25	Contract — Waiver Agreement between Owens Bottle Co., Hartford-Empire Co. and Federal Glass Co	16714	8731
96	8/14/25	Contract—Indemnity Agreement between Owens Bottle Co., Hartford-Empire Co., Tucker, Reeves & Beatty, et al	16721	8734
97	8/14/25	Assignment of Licenses and Bill of Sale, Tucker, Reeves & Beatty to C. B. Belknap	16727	8736
98	8/14/25	Contract — Loan and Security Therefor between Owens Bottle Co. and Hartford-Empire Co	16735	8738
99	8/14/25	Option, C. B. Belknap to Feeder Patents Co	16738	8739
100	8/14/25	Contract—Agreement as to Current License Fees between C. B. Belknap and Tucker, Reeves & Beatty	16746	8744
101	8/14/25	Contract re Capstan and Federal royalties, between Federal Glass Co. and C. B. Belknap	16748	8745
102	8/14/25	Contract re Tucker & Reeves machines for foreign use, between Owens Bottle Co., Hartford-Empire Co. and Tucker, Reeves & Beatty	16756	8749
103	12/31/25	Contract re Assignment of royalties, etc., between Owens Bottle Co. and Hartford-Empire Co	16758	8750
104	12/30/25	Minutes of meeting of directors of Feeder Patents Co	58861	12590
105	12/31/25	Contract between C. B. Belknap, Feeder Patents Co., Hartford-Empire Co. and Owens Bottle Co	16766	8753
106	12/31/25	Assignment of Licenses, C. B. Belknap to Feeder Patents Co	16771	8755

Exhibit Number	Date	Description	Original	Print
107	12/31/25	Assignment of Licenses, Feeder Patents Co. to Hartford-Empire Co	16773	8756
108	2/ 9/25	Contract amending 1924 General License Agreement (Ex. 55) between Owens Bottle Co., Hartford-Empire Co. et al	16775	8756
109	9/25/28	Letter, Carter to F. G. Smith	58862	12502
110	10/ 3/28	Letter, Carter to Brown	58863	12503
111	10/18/28	Letter, F. G. Smith to Boshart	58867	12507
112	10/18/28	Contract for sale of patent rights, between Rankin Automatic Glass Feeder Co. and Hartford-Empire Co	16779	8758
113	11/ 9/28	Assignment, Rankin Automatic Glass Feeder Co. et al. to Hartford-Empire Co	16791	8761
114	8/ 7/28	Letter, Carter to Phillippe	58869	12509
115	8/ 1/28	Letter, F. G. Smith to Carter	58871	12601
116	9/ 8/28	Letter, Carter to F. G. Smith	58879	12609
117	1/15/29	Letter and memos, Champeau to Carter	58880	12610
118	6/27/29	Letter, Champeau to Carter	58887	12617
119	7/27/29	Letter, Carter to Phillippe	58889	12620
120	1/16/30	Letter and memo, Champeau to Carter	58891	12622
121	10/20/32	Letter, Carter to Phillippe	58900	12631
122	6/16/24	Letter, H. K. Smith to Baker	58901	12633
123	6/19/24	Letter, Heintselman to F. G. Smith	58905	12636
124	8/ 4/24	Letter, F. G. Smith to McNerney	58908	12637
125	8/11/27	Letter, H. K. Smith to I. J. Collins	58910	12638
126	9/29/27	Letter, F. G. Smith to Beatty	58911	12639
127	10/ 8/30	Memo by Williams	58915	12641
128	11/13/31	Letter, W. E. Levis to F. G. Smith	58918	12644A
129	12/ 2/31	Letter, W. E. Levis to F. G. Smith	58919	12644B
130	5/ 6/32	Letter, F. G. Smith to McNash	58920	12644C
131	5/12/32	Telegram, F. G. Smith to Falck	58921	12645
132	5/16/32	Letter, Naylor to Hatch	58922	12645
133	5/16/32	Memo by Naylor	58923	12646
134	5/20/32	Memo by Hatch	58926	12648
135	5/20/32	Letter, Hatch to Naylor	58928	12650
136	12/11/25	Letter, Brown to Carter	58930	12652
137	5/25/26	Memo, Carter to Boshart	58931	12653
138	7/ 9/26	Letter, Hatch to Kimes	58932	12654

Exhibit Number	Date	Description	Original	Print
139	5/28/32	Memo, W. E. Levis to Carter et al	58934	12656
140	6/15/32	Letter, F. G. Smith to Falck.....	58937	12659
141	7/18/32	Memo by Carter.....	58942	12662
142	7/ 1/32	Contract—General License Agreement between Hartford-Empire Co. and Hasel-Atlas Glass Co..	16800	8764
143	7/ 1/32	Contract — Supplemental Agreement between Hartford-Empire Co. and Hasel-Atlas Glass Co..	16828	8780
144	7/ 1/32	Contract—Agreement for Cancellation and Reinstatement, etc., between Owens-Illinois Glass Co. and Hartford-Empire Co...	16840	8783
145	7/ 1/32	Contract—General License Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co.	16852	8787
146	7/ 1/32	Contract — Supplemental Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co.	16880	8803
147	7/ 1/32	Contract—Suction Inventions License Agreement between Hartford - Empire Co. and Owens-Illinois Glass Co.....	16884	8805
148	7/ 1/32	Contract—General License Agreement between Owens-Illinois Glass Co. and Hasel-Atlas Glass Co.....	16900	8813
149	7/ 1/32	Contract — Supplemental Agreement between Owens-Illinois Glass Co. and Hasel-Atlas Glass Co.....	16920	8821
150	7/21/32	Statement to press by Hartford-Empire Co. and Hasel-Atlas Glass Co.....	58959	12674
151	8/25/32	Contract — General Agreement, Hartford-Empire Co. and Knox Glass Bottle Co. et al.....	16929	8827
152	11/10/32	Contract — General Agreement, Hartford-Empire Co. and Lamb Glass Co.....	16984	8839
153	11/10/32	Contract — Settlement for damages, Hartford-Empire Co. and Lamb Glass Co.....	17024	8856
154	9/15/32	Contract — General Agreement, Hartford-Empire Co. and Universal Glass Products Co.....	17028	8858
155	11/16/32	Letter, McNash to F. G. Smith..	58960	12675

Exhibit Number	Date	Description	Original	Print
156	12/16/32	Contract — Settlement Agreement Hartford-Empire Co. and Maywood Glass Co	17063	8860
157	12/16/32	Contract—License and Lease No. BF-9, Hartford-Empire Co. to Maywood Glass Co	17068	8863
158	12/ 7/32	Contract — Settlement Agreement, Hartford-Empire Co. and Latchford Glass Co	17095	8863
159	12/ 7/32	Contract — General Agreement, Hartford-Empire Co. and Latchford Glass Co	17099	8865
160	7/27/32	Letter, F. G. Smith to I. J. Collins	58961	12676
161	1/23/33	Contracts—General Feeder Agreement, Settlement Agreement and Bill of Sale, Hartford-Empire Co. and Brockway Machine Bottle Co	17138	8865
162	1/10/33	Letter, F. G. Smith to A. Houghton	58963	12678
163	3/ 7/33	Letter Agreement, Hartford-Empire Co. and Hasel-Atlas Glass Co	17172	8866
164	4/ 7/33	Letter, F. G. Smith to W. E. Levis	58965	12681
165	6/30/33	Letter, F. G. Smith to Falck	58966	12681
166	7/11/33	Letter and memo, Brown to C. B. Belknap	58971	12684
167	8/ 2/33	Letter, F. G. Smith to A. Houghton	58975	12688
168	8/10/33	Letter, F. G. Smith to A. Houghton	58976	12688
168A	7/28/33	Letter, Philbin to McNash	58978	12689
169	8/24/33	Letter, F. G. Smith to A. Houghton	58980	12692
170	8/24/33	Contract amending 1932 Supplemental Agreement (Ex. 143) between Hartford-Empire Co. and Hasel-Atlas Glass Co	17174	8867
171	3/22/26	Letter, H. K. Smith to G. A. Ball	58982	12693
172	3/30/26	Memo by H. K. Smith	58985	12695
173	1/29/27	Letter, W. E. Levis to F. G. Smith	58988	12698
174	5/14/29	Letter, F. G. Smith to Carter	58990	12701
175	5/18/29	Letter, Carter to F. G. Smith	58991	12702
176	9/30/32	Letter, McNash to F. G. Smith	58993	12702
177	10/ 6/32	Memo by F. G. Smith	58994	12703
178	10/10/32	Letter, F. G. Smith to I. J. Collins	58995	12703

Exhibit Number	Date	Description	Original	Print
179	10/17/32	Telegram, F. G. Smith to F. C. Ball	58997	12705
180	10/17/32	Letter, F. G. Smith to F. C. Ball	58998	12705
181	12/22/32	Letter, F. G. Smith to F. C. Ball	58999	12706
182	12/23/32	Letter, Eldred to Underwood	59001	12707
183	12/24/32	Letter, Underwood to Eldred	59003	12708
184	1/10/33	Letter, F. G. Smith to Underwood	59005	12710
185	1/18/33	Memo, F. G. Smith to Safford	59006	12710
186	1/20/33	Memo, unsigned	59009	
187	1/21/33	Letter, F. G. Smith to McNash	59010	12711
188	1/25/33	Letter, McNash to F. G. Smith	59012	12712
189	2/ 1/33	Letter, Carter to C. B. Belknap	59014	12713
190	2/ 1/33	Letter, Carter to C. B. Belknap	59018	12716
191	2/ 9/33	Memo by McNash	59020	12717
192	3/ 4/33	Letter, Underwood to F. G. Smith	59022	12718
193	3/ 4/33	Letter, Underwood to F. C. Ball	59023	12719
194	3/ 7/33	Letter, F. G. Smith to Underwood	59025	12721
195	11/ 2/24	Contract — License Agreement between Owens Bottle Co. et al. and Ball Bros. Co	17178	8869
196	3/23/33	Contract between Knox Glass Bottle Co. et al. and Ball Bros. Co	17211	8871
197	3/29/33	Letter, Safford to Knox Glass Bottle Co	59026	12722
198	3/23/33	Contract — Cancellation of Domestic Fruit Jar Rights, between Hartford-Empire Co. and General Glass Corp	17220	8876
199	3/25/33	Contract — General Feeder License Agreement between Hartford-Empire Co. and Ball Bros. Co	17224	8877
200	4/27/33	Contract between Brockway Machine Bottle Co. et al. and Ball Bros. Co	17272	8901
201	5/ 3/33	Letter, F. C. Ball to F. G. Smith	59027	12723
202	1/21/35	Letter, F. C. Ball to F. G. Smith	59028	12724
203	1/23/35	Letter, F. G. Smith to F. C. Ball	59030	12727
204	2/25/35	Letter, F. C. Ball to F. G. Smith	59032	12728
205	7/ 5/33	Letter, Eldred to Hubbard	59034	12730
206	7/21/33	Letter, F. G. Smith to McNash	59036	12732
207	7/31/33	Letter, McNash to F. G. Smith	59037	12733
208	2/ 1/34	Memo, Eldred to F. G. Smith	59038	12735
209	11/27/34	Letter, F. C. Ball to F. G. Smith	59044	12740A
210	12/ 7/34	Letter, F. C. Ball to F. G. Smith	59045	12740B

Exhibit Number	Date	Description	Original	Print
211	12/11/34	Letter, F. G. Smith to F. C. Ball.	59046	12741
212	1/18/35	Letter, F. G. Smith to F. C. Ball.	59048	12741
213	1/23/35	Letter, F. C. Ball to F. G. Smith.	59049	12742A
214	1/25/35	Letter, F. G. Smith to W. E. Levis	59060	12742B
215	1/28/35	Letter, W. E. Levis to F. G. Smith	59051	12742C
216	2/ 5/35	Letter, W. E. Levis to F. G. Smith	59052	12742D
217	2/ 7/35	Letter, F. G. Smith to W. E. Levis	59053	12743
218	8/ 1/35	Letter, G. A. Ball to F. G. Smith.	59054	12743
219	8/ 5/35	Letter, F. G. Smith to G. A. Ball	59055	12744
220	5/ 6/35	Letter, F. C. Ball to F. G. Smith.	59056	12744
221	5/ 8/35	Letter, F. G. Smith to F. C. Ball.	59057	12745
222	9/30/32	Letter, McNash to F. G. Smith.	59058	12746
223	10/ 3/32	Letter, F. G. Smith to McNash.	59059	12746
224	4/26/33	Letter, McNash to F. G. Smith.	59060	12747
225	7/20/37	Memo, Safford to F. G. Smith.	59061	12748
226	12/23/35	Memo by Brown	59062	12748
227	12/ 6/35	Letter, F. G. Smith to G. A. Ball.	59065	12750
228	1/14/36	Letter, Werbe to Hartford-Empire Co.	59067	12751
229	1/22/36	Letter, F. G. Smith to F. C. Ball.	59069	12754
230	1/24/36	Letter, F. C. Ball to F. G. Smith.	59071	12754
231	12/ 8/20	Contract — General Agreement between Hartford-Fairmont Co. and Thatcher Mfg. Co	17285	8907
232	10/31/24	Letter, Howard to F. G. Smith.	59072	12754
233	3/ 1/25	Memo by H. K. Smith	59076	12755
234	12/ 1/25	Contract — Supplemental Agreement between Hartford-Empire Co. and Thatcher Mfg. Co.	17316	8926
235	12/29/25	Letter, Baldwin to H. K. Smith.	59079	12758
236	6 2/26	Letter, H. K. Smith to Mandeville	59082	12759
237	10/18/26	Contract between Hartford-Empire Co. and Thatcher Mfg. Co.	17322	8929
238	12/12/27	Memo by H. K. Smith	59084	12760
239	3/13/28	Letter, H. K. Smith to Mandeville	59085	12761
240	4/13/28	Contract — Consolidated Agreement between Hartford-Empire Co. and Thatcher Mfg. Co.	17329	8931
241	4/20/28	Letter, Mandeville to F. G. Smith	59087	12762A
242	12/ 5/32	Contract between Thatcher Mfg. Co. and Knox Glass Bottle Co. et. al.	17361	8950
243	12/ 6/32	Contract between Hartford-Empire Co. and Knox Glass Bottle Co. et al	17367	8954

Exhibit Number	Date	Description	Original	Print
244	2/15/34	Letter, Mandeville to F. G. Smith.	59089	12765
245	2/17/34	Letter, F. G. Smith to Mandeville.	59092	12768
246	2/17/34	Letter, F. G. Smith to A. Houghton	59093	12769
247	4/12/34	Letter, F. G. Smith to Mandeville.	59096	12773
248	1/ 1/26	Contract — General Agreement between Thatcher Mfg. Co. and Hartford-Empire Co	17373	8956
249	6/28/26	Letter, F. G. Smith to Carter	59097	12775
250	4/26/29	Letter, C. B. Belknap to Beahart	59099	
251	5/ 3/29	Letter, F. G. Smith to W. J. Belknap	59103	12774
252	7/30/29	Letter, H. K. Smith to F. G. Smith	59105	12776
253	7/30/29	Memo, unsigned, headed "Knox-O'Neill"	59107	12777
254	7/29/29	Memo, Parham to H. K. Smith	59114	12782
255	7/29/29	Memos by Peiler et al	59118	12787
256	Undated	Memo, unsigned, headed "Reasons for Draft of Plan Set Forth Below"	59132	12798
257	Undated	Memo, unsigned, headed "Plan".	59134	12800
258	Undated	Memo by H. K. Smith	59147	
259	12/20/29	Letter, F. G. Smith to Carter	59153	12807
260	3/10/30	Letter, F. G. Smith to Carter	59154	12808
261	11/29/30	Memo by H. K. Smith	59156	12809
262	11/ 7/31	Letter, Carter to F. G. Smith	59159	12811
263	3/ 6/33	Option, O'Neill Machine Co. et al. to Owens-Illinois Glass Co	17405	8972
	4/ 4/33	Letter, Owens-Illinois Glass Co. to O'Neill Machine Co. et al	17406	8973
	4/ 5/33	Contract between O'Neill Machine Co. et al. and Owens-Illinois Glass Co	17411	
264	5/ 6/33	Contract between O'Neill Machine Co. et al. and Owens-Illinois Glass Co	17472	8983
265	5/ 3/33	Letter, O'Neill to Hartford-Empire Co. with Exhibits A and B.	17503	8995
	6/28/33	Letter, F. G. Smith to Knight	17511	
	6/30/33	Letter, O'Neill to Hartford-Empire Co	17512	9000
	6/19/33	License, O'Neill to Hartford-Empire Co	17513	
266	9/ 1/36	Contract — Agreement relating to Knox-O'Neill Suction Machines, between Hartford-Empire Co. and Knox Glass Bottle Co. et al.	17515	9001

Exhibit Number	Date	Description	Original	Print
267	1/16/27	Letter Agreement, Hartford-Empire Co. and Underwood	59161	
268	8/19/28	Letter, H. K. Smith to F. G. Smith	59163	12812
269	12/10/26	Memo by H. K. Smith	59166	
271	10/27/27	Letter, F. G. Smith to Falck	59168	12813
272	11/ 2/27) 11/ 3/27)	Excerpts from diary of H. K. Smith		
273	11/ 7/27	Excerpt from diary of H. K. Smith	59172	
274	4/11/28) 5/26/28)	Excerpts from diary of H. K. Smith	59173	1281[illegible]
275	2/10-11/31	Memo by H. K. Smith	59174	12815
276	5/26/31	Memo, Carter to W. E. Levis	59179	12819
277	11/11/31	Excerpt from diary of H. K. Smith	59182	12822
278	5/ 6/33	Memo, Brown to F. G. Smith	59183	12823
279	12/ 9/30	Telegram, F. G. Smith to Carter	59184	12824A
280	9/ 1/27	Letter, F. G. Smith to Arkell	59185	12825
281	8/21/30	Excerpt from diary of H. K. Smith	59187	12826
282	10/26/30) 10/27/30)	Excerpts from diary of H. K. Smith	59188	12826
283	12/31/30	Excerpt from diary of H. K. Smith	59189	
284	5/14/31	Excerpt from diary of H. K. Smith	59190	
285	6/12/31	Memo by H. K. Smith	59191	12826
286	6/11/31	Letter, Carter to W. E. Levis	59194	12828
287	9/30/31	Contract between Niviscn-Weiskopf Co. and General Glass Corp	17557	9006
288	9/16/32	Contract - Niviscn - Weiskopf Settlement Agreement between Hartford-Empire Co. and General Glass Corp	17565	9013
289	11/23/32	Entry as to settlement of suit between Hartford-Empire Co. and Niviscn-Weiskopf Co	59197	12830
290	2/15/26	Letter, W. E. Levis to Rawleigh	59198	12831
291	2/24/26	Letter, W. E. Levis to Rawleigh	59199	12832
292	11/28/23	Memo by Hatch	59200	12833
293	6/26/24	Letter, F. G. Smith to C. B. Belknap	59202	12834
294	7/10/24	Letter, F. G. Smith to Carter	59204	12836
295	7/15/24	Memo by F. G. Smith	59206	12837
296	7/22/24	Memo by Carter	59210	12839
297	8/25/24	Letter, F. G. Smith to Boshart	59220	12851
298	8/25/24	Letter, F. G. Smith to Boshart	59221	12851
299	10/20/24	Memo by Honiss, Brown, Hatch and Peiler	59222	12852

Exhibit Number	Date	Description	Original	Print
300	10/27/24	Memo by Honiss, Brown, Hatch and Feller	59226	12855
301	1/ 9/25	Reports by Baker to Executive Committee of Owens Bottle Co.	59228	12857
302	2/ 9/25	Contract — Forming Machine Agreement between Whitall Tatum Co. and Hartford-Empire Co	17568	9015
303	2/ 9/25	Contract — Agreement Relating to Whitall Tatum Agreement, between Owens Bottle Co. and Hartford-Empire Co	17600	9032
304	10/24/27	Memo, Brown to F. G. Smith	59231	12860
305	6/ 1/29	Contract — Forming Machine Agreement between Whitall Tatum Co. and Hartford-Empire Co	17606	9035
306	6/ 1/29	Contract—Agreement Relating to Whitall Tatum Agreement, between Owens-Illinois Glass Co. and Hartford-Empire Co	17639	9051
307	10/ 5/18) 2/16/25) 2/16/25) 2/16/25)	Assignments by Receiver and Trustee of United Bottle Machinery Co. to Hartford-Empire Co	17648	9056
308	8/ 6/32	Memo, Carter to Phillippe	59232	12862
309	4/29/33	Memo, Brown to F. G. Smith	59235	12863
310	6/12/33	Telegram, W. E. Levis to F. G. Smith	59240	12868
311	6/20/33	Letter, C. B. Belknap to F. G. Smith	59241	12869
312	6/22/33	Memo, Brown to F. G. Smith	59242	12869
313	4/15/31	Memo by H. K. Smith	59246	12873
314	7/28/31	Memo by H. K. Smith	59248	12874
315	8/ 1/31	Memo by H. K. Smith	59253	12878
316	7/ 3/33	Telegram, Hartford-Empire Co. to Bridges	59254	12879
317	7/ 4/33	Telegram, Lynch Corp, to Werbe	59255	12880
318	7/15/33	Telegram, Bridges to Lynch Corp.	59256	12881
319	7/17/33	Memo, unsigned	59257	12882
320	7/17/33	Memo by Safford	59258	12883
321	7/19/33	Telegram, Bridges to Werbe	59269	12894
322	7/18/33	Memo, unsigned, headed "Outline of Proposed Agreement"	59270	12895
323	1933	Memo by Safford	59272	12897
324	7/19/33	Memo by Safford	59274	12899

Exhibit Number	Date	Description	Original	Print
325	7/22/33	Letter, W. J. Belknap and Brown to F. G. Smith	59277	12902
326	8/14/33	Memo, unsigned	59278	12903
327	8/21/33	Contract between Edward Miller and Lynch Corp.	17651	9069
328	8/23/33	Contract—License Agreement between Owens-Illinois Glass Co. and Lynch Corp.	17759	9083
329	8/23/33	Contract—Feeder License from Lynch Corp. to Hartford-Empire Co.	17665	9085
330	8/23/33	Contract—License Agreement between Hartford-Empire Co. and Lynch Corp.	17667	9087
330A	8/23/33	Schedule A of Ex. 330	17678	9075
330B	8/23/33	Schedule B of Ex. 330	17690	9082
331	9/ 2/33	Letter, Werbe to F. G. Smith	59279	12905
332	9/ 6/33	Letter, F. G. Smith to Werbe	59281	12906
333	9/13/33	Letter, Parham to Werbe	59283	12907
334	9/13/33	Letter, Werbe to Hartford-Empire Co.	59285	
335	9/20/33	Letter, Safford to Werbe	59286	12909
336	9/19/33	Contract between Whitall Tatum Co. and Hartford-Empire Co.	17693	9063
337	9/26/33	Contract—Agreement Relating to Whitall Tatum Forming Machine Rights, between Hartford-Empire Co. and Owens-Illinois Glass Co.	17701	9087
338	10/17/33	Letter, Lynch Corp. to Fairmount Glass Works	59288	12910
339	10/30/33	Letter, Safford to Werbe	59289	12911
340	11/12/33	Contract — Amended Agreement between Hartford-Empire Co. and Lynch Corp.	17720	9091
341	1/ 7/26	Letter, F. G. Smith to Fry	59291	12913
342	2/11/26	Letter, F. G. Smith to Falck	59292	12913
343	2/17/26	Letter, Falck to F. G. Smith	59294	12915
344	2/20/26	Memo, H. K. Smith to F. G. Smith	59295	12916
345	2/12/26	Letter, F. G. Smith to Falck	59296	12916A
346	2/18/26	Letter, Falck to F. G. Smith	59297	12917
347	4/27/26	Letter, F. G. Smith to Curtiss	59298	12917
348	4/19/26	Letter, Curtiss to F. G. Smith	59299	12918
349	4/28/27	Letter, Hiller to Curtiss	59300	12919
350	5/19/26	Letter, F. G. Smith to Receivers of H. C. Fry Glass Co.	59301	12920
351	7/13/26	Letter, F. G. Smith to Falck	59302	12921

Exhibit Number	Date	Description	Original	Print
352	10/ 3/27	Letter Agreement, Hartford-Empire Co. and Corning Glass Works	17724	9084
353	5/27/28	Letter, F. G. Smith to Curtiss	59303	12921
354	10/26/29	Letter, Curtiss to F. G. Smith	59304	
355	6/15/31	Letter, M. A. Smith to F. G. Smith	59305	
356	6/22/31	Letter, Pease to M. A. Smith	59306	
357	7/ 2/31	Letter, Curtiss to Pease	59307	
358	7/28/31	Memo, Curtiss to Houghton	59308	12924
359	7/29/31	Letter, M. A. Smith to Curtiss	59311	12927
360	8/12/31	Letter, Curtiss to M. A. Smith	59312	12928
361	6/ 6/32	Letter, F. G. Smith to A. Houghton	59313	12929
362	10/12/32	Letter, F. G. Smith to Curtiss	59314	12930
363	5/ 3/34	Letter, Parham to Curtiss	59317	12932
364	5/ 3/34	Letter Agreement, Hartford-Empire Co. and Corning Glass Works	17725	9095
365	1/25/37	Letter, Gaunt to Pease	59318	12933
366	2/ 5/37	Letter, Gaunt to Pease	59319	12934
367	2/ 9/37	Letter, Pease to Gaunt	59320	12935
368	2/ 9/37	Letter, Pease to Peden	59321	12936
369	11/20/37	Letter, F. G. Smith to A. Houghton	59322	12936
370	11/24/37	Letter, F. G. Smith to A. Houghton	59323	12937
371	11/24/37	Memo, Safford to F. G. Smith	59324	12937
372	12/ 6/37	Letter, C. B. Belknap to A. Houghton	59326	12939
373	12/ 8/37	Letter, A. Houghton to F. G. Smith	59327	12939
374	12/ 9/37	Memo, LaFollette to Sullivan	59328	12940
375	3/11/38	Memo, Peden to A. Houghton	59329	12941
376	2/ 7/38	Letter, F. G. Smith to A. Houghton	59331	12943
377	2/ 5/38	Letter, W. J. Belknap to F. G. Smith	59332	12944
378	2/ 5/38	Letter, W. J. Belknap to F. G. Smith	59334	12946
379	6/26/28	Contract between Hartford-Empire Co. and Corning Glass Works	17727	9096
380	12/ 6/29	Memo by H. K. Smith	59335	12947
381	1/23/30	Contract — Special Agreement Amending Glass Contract between Corning Glass Works and Hartford-Empire Co.	17734	9099

Exhibit Number	Date	Description	Original	Print
382	9/14/31	Letter, Denny to Curtiss	59338	12948
383	6/16/27	Letter, Curtiss to C. B. Belknap	59339	
384	2/27/32	Memo, Curtiss to A. Houghton	59340	12954
385	4/ 4/32	Memo, Curtiss to A. Houghton	59341	12959
386	3/26/30	Memo, Parham to F. G. Smith	59342	12951
387	5/19/30	Letter, H. K. Smith to Green	59346	12964
388	2/18/30	Memo by H. K. Smith	59352	12968
389	6/ 4/30	Memo by H. K. Smith	59380	12977
390	6/26/30	Rough draft Memo, unsigned	59383	12979
391	1/14/31	Letter, H. K. Smith to Green	59387	12982
392	12/20/30	Memo, unsigned, headed "Summary of Status of Discussions on Revision of Glass Contract"	59389	12985
393	3/ 3/31	Memo, unsigned	59408	12995
394	3/ 9/31	Memo, unsigned	59419	13000
395	3/26/28	Memo by H. K. Smith	59422	13001
396	5/19/24	Letter, F. G. Smith to Baker	59428	13006
397	5/23/24	Letter, Baker to F. G. Smith	59430	13006A
398	2/16/25	Letter, Baker to F. G. Smith	59431	13006B
399	12/23/26	Memo by H. K. Smith	59432	13006C
400	1/ 4/27) 1/ 5/27)	Excerpts from diary of H. K. Smith	59433	13009
401	1/21/27	Letter, Carter to F. G. Smith	59434	13010
402	4/ 1/27	Letter, F. G. Smith to Carter	59436	13011
403	5/ 8/29	Letter, F. G. Smith to Carter	59439	13012
404	3/18/30	Memo, Pease to Safford	59441	13014
405	5/23/30	Letter, H. K. Smith to Williams	59442	13014
406	10/28/30	Memo by H. K. Smith	59445	13017
407	11/20/30	Letter, H. K. Smith to Williams	59448	13019
408	11/11/30	Memo by H. K. Smith	59450	13020
409	12/12/30	Memo, Carter to W. E. Levis	59455	13024
410	2/ 9/31	Letter, F. G. Smith to Carter	59458	13025
411	2/ 2/31	Contract amending Sec. 23 of Owens-Hartford General License Agreement (Ex. 55)	17740	9102
413	9/ 8/27	Letter, Beatty to F. G. Smith	59459	13025
414	9/17/27	Letter, F. G. Smith to Beatty	59465	13031
415	Undated	Stipulation between U. S. and Hartford-Empire Co.	15065	7926
416	11/28/32	Letter, F. G. Smith to Carter	59471	13036A
417	9/30/27	Letter, F. G. Smith to L. J. Collins	59472	13036B
418	10/26/27	Letter, F. G. Smith to Macbeth	59473	13037
419	3/ 7/30	Letter, Pease to Carter	59474	13037
420	3/11/30	Letter, Pease to Carter	59476	13039
421	5/10/28	Letter, F. G. Smith to G. F. Collins	59477	13039
422	4/24/28	Letter, L. M. Buck to F. G. Smith	59479	13041
423	7/ 3/29	Letter, H. K. Smith to Mandeville	59482	13044
424	7/10/29	Memo by H. K. Smith	59483	13045

Exhibit Number	Date	Description	Original	Print
425	12/27/29	Letter, F. G. Smith to Mandeville	59485	13047
426	6/ 6/30	Memo by H. K. Smith	59486	13048
427	10/26/32	Letter, L. M. Buck to F. G. Smith	59487	13049
428	12/ 2/32	Letter, L. M. Buck to F. G. Smith	59488	13050
429	1/ 5/33	Letter, L. M. Buck to F. G. Smith	59489	13051
430	12/10/29	Letter, F. G. Smith to G. F. Collins	59490	13053
431	12/27/29	Letter, Mandeville to F. G. Smith	59491	13053
432	12/30/29	Letter, Mandeville to F. G. Smith	59492	13054
433	9/25/34	Memo, Brown to F. G. Smith	59494	13055
434	3/21/25	Letter, Wilson to F. G. Smith	59496	13057
435	3/23/25	Letter, F. G. Smith to Wilson	59497	13058
436	7/13/25	Telegram, Eldred to Baker	59499	13060
437	7/17/25	Letter, Eldred to Pfau	59500	
438	7/20/25	Letter, Pfau to Hartford-Empire Co.	59502	
439	7/24/25	Memo, Eldred to Hiller	59504	13061
440	8/17/25	Letter, Hiller to Pfau	59505	13061
441	8/17/25	Report by Hiller	59506	13062
442	8/26/25	Letter, Eldred to Pfau	59508	13063
443	9/21/25	Letter, Old Dominion Glass Corp. to Hartford-Empire Co.	59509	13064A
444	9/23/25	Letter, Hartford-Empire Co. to Old Dominion Glass Corp.	59510	13065
445	8/24/25	Letter, Warrick to Hartford-Empire Co.	59512	13066
446	8/29/25	Letter, Eldred to Warrick	59513	13067
447	9/ 3/25	Letter, Warrick to Eldred	59515	13068
448	9/10/25	Letter, Eldred to Warrick	59516	13069
449	10/14/25	Letter, Wormser Glass Co. to Hartford-Empire Co.	59517	13070A
450	10/16/25	Letter, Eldred to Wormser Glass Co.	59518	13071
451	10/19/25	Letter, Wormser Glass Co. to Hartford-Empire Co.	59519	13072A
452	10/26/25	Letter, Wormser Glass Co. to Hartford-Empire Co.	59520	13072B
453	10/29/25	Letter, Eldred to Wormser Glass Co.	59521	13073
454	10/30/25	Memo, Eldred to Hiller	59522	13073
455	11/10/25	Telegram, Wormser Glass Co. to Hartford-Empire Co.	59523	13074A
456	11/10/25	Telegram, Eldred to Wormser Glass Co.	59524	13074B
457	11/10/25	Letter, Eldred to Howard	59525	13075
458	11/12/25	Telegram, Howard to Eldred	59526	13076
459	11/12/25	Telegram, Eldred to Wormser Glass Co.	59527	13077

Exhibit Number	Date	Description	Original	Print
460	11/16/25	Letter, Howard to Eldred	59528	13078
461	11/25/25	Letter, Tucker, Reeves & Beatty to F. G. Smith	59531	13081
462	10/20/25	Letter, Wormser Glass Co. to Tucker, Reeves & Beatty	59532	
463	10/14/30	Letter, Simpson to Hartford-Empire Co.	59533	13082
464	10/17/30	Letter, Northend to Simpson	59534	13083
465	4/ 3/31	Letter, Crowell to Hartford-Empire Co.	59535	13083
466	4/ 9/31	Letter, Eldred to Crowell	59536	13084
467	4/ 9/31	Letter, Eldred to C. Cole	59538	13085
468	4/15/31	Letter, Crowell to Eldred	59539	13086
469	6/10/31	Letter, Eldred to Kiefer	59540	13087
470	10/19/31	Memo, Northend to Pease	59542	13088
471	10/22/31	Letter, Northend to Glass Syndicate	59543	13089
472	11/ 3/31	Letter, Searway to Northend	59546	13091
473	11/ 9/31	Letter, Northend to Searway	59547	13091
474	12/21/32	Memo by Pease	59548	13092
475	4/13/33	Letter Agreement, Hartford-Empire Co. and Capstan Glass Co.	17743	9102A
476	1/14/33	Letter, Pease to Ackerman	59550	13093
477	1/17/33	Letter, Ackerman to Pease	59551	13094
478	1/ 9/33	Letter, Ackerman to Gause	59552	13095
479	8/ 1/33	Letter, Northend to Gause	59554	13097
480	9/13/33	Letter, Eldred to Gause	59555	
481	4/14/33	Telegram, Searey to Safford	59557	13098
482	4/29/33	Memo by Safford	59558	13099
483	12/31/34	Letter, Pease to Moore	59560	13100
484	1/11/35	Memo by F. G. Smith	59561	13100
485	4/16/35	Letter and memo, Pease to W. E. Levis	59563	13102
486	4/20/35	Memo, unsigned	59565	
487	4/22/35	Letter, Boeschenstein to Pease	59566	13104
488	7/12/35	Memo by Hatch	59567	13105
489	7/10/35	Letter, Wallis to Hartford-Empire Co.	59570	13106
490	7/16/35	Letter, Pease to Wallis	59572	13107
491	7/20/35	Letter, Wallis to Pease	59574	13108A
492	1/ 4/36	Letter, Wallis to Hartford-Empire Co.	59575	13108B
493	1/14/36	Letter, Pease to Wallis	59576	13109
494	2/ 8/36	Letter, Wallis to Pease	59578	13110
495	2/18/36	Letter, Pease to Wallis	59580	13111
496	1/27/36	Letter, Day to Pease	59582	13112
497	2/ 1/36	Letter, Pease to Day	59583	13112A

Exhibit Number	Date	Description	Original	Print
498	2/ 6/36	Letter, Day to Pease	59584	13113
498A	2/ 6/36	Letter, Day to Pease	59585	13113
499	2/ 9/36	Telegram, Pease to Day	59586	.....
500	2/18/36	Letter, Day to Pease	59587	.....
501	2/26/36	Letter, Day to Pease	59588	13114
502	2/28/36	Letter, Pease to Day	59589	13114A
503	1/16/37	Letter, Ackerman to Pease	59591	13114C
504	2/11/37	Letter, Ackerman to Pease	59592	13114D
505	7/15/37	Letter, Naylor to Hatch	59593	13115
506	9/18/37	Memo, Pearce to Pease	59594	13115
507	9/23/37	Letter, Pearce to Johnson	59597	13118
508	8/20/37	Letter, Pease to Wheeler	59598	13118
509	8/25/37	Letter, Ackerman to Pease	59599	13120A
510	8/26/37	Letter, Ackerman to Wheeler	59600	13121
511	10/28/38	Letter, W. S. Hubbard to F. G. Smith	59601	13122
512	10/31/38	Letter, F. G. Smith to W. S. Hubbard	59602	13123
513	11/29/38	Letter, W. S. Hubbard to F. G. Smith	59603	13124
514	12/21/38	Letter, F. G. Smith to W. S. Hubbard	59604	13125
515	12/28/38	Letter, W. S. Hubbard to F. G. Smith	59605	13126
516	1/ 9/39	Letter, F. G. Smith to W. S. Hubbard	59607	13128
517	1/13/39	Letter, W. S. Hubbard to F. G. Smith	59608	13129
518	5/20/33	Letter, Pease to Warfield	59609	13131
519	6/ 5/33	Letter, Pease to Warfield	59611	13132
520	7/14/38	Letter, Avery to Pearce	59613	13134
521	7/19/38	Letter, Pearce to Avery	59614	13135
522	2/14/40	Letter, Avery to Hartford-Empire Co	59615	13136
523	2/16/40	Letter, Pease to Avery	59616	13137
524	2/21/40	Letter, Avery to Pearce	59617	13138
525	2/26/40	Letter, Pease to Avery	59618	13139
526	4/ 5/37	Letter, Rau to Hartford-Empire Co	59619	13140
527	4/10/37	Letter, Pease to Rau	59620	13141
528	9/26/34	Memo, F. G. Smith to Falck	59621	13142
529	7/ 7/36	Letter, Werbe to Safford	59622	13143
530	7/10/36	Letter, Brown to Werbe	59623	13/44
531	7/22/36	Letter, Werbe to Safford	59624	13145
532	7/22/36	Letter, Werbe to Reed	59625	13146
533	7/29,36	Letter, F. G. Smith to Reed	59626	13147
534	8/ 1/36	Letter, Reed to F. G. Smith	59627	13148

Exhibit Number	Date	Description	Original	Print
535	8/ 4/36	Letter, F. G. Smith to Reed	59628	13149
536	8/17/36	Letter, Reed to F. G. Smith	59630	13151
537	8/19/36	Letter, F. G. Smith to Reed	59632	13153
538	9/21/36	Letter, Brown to Reed	59634	13155
539	6/18/37	Memo, F. G. Smith to Falck	59636	13157
540	6/21/37	Letter, F. G. Smith to A. Houghton	59637	13157
541	10/16/33	Letter, Eldred to C. H. Hubbard	59638	13158
542	11/ 3/33	Letter, Hatch to C. H. Hubbard	59639	
543	2/14/34	Letter, Pease to C. H. Hubbard	59641	
544	10/31/34	Letter, Pease to C. H. Hubbard	59642	
545	1/12/35	Letter, Pease to C. H. Hubbard	59643	
546	3/ 7/35	Letter, Pease to C. H. Hubbard	59645	
547	3/29/35	Letter, Pease to C. H. Hubbard	59646	
548	6/11/35	Letter, Pease to C. H. Hubbard	59647	13158
549	4/ -/24	Letter, F. G. Smith to Owens Bottle Co	59648	13159
550	12/ 3/24	Letter, Brown to F. G. Smith	59649	13160
551	3/24/25	Letter, Brown to Carter	59652	13162
552	3/31/25	Letter, Carter to Brown	59653	13163
553	4/13/26	Letter, Carter to Brown	59654	13163
554	3/ 8/28	Letter, Carter to Hatch	59655	13164
555	11/28/28	Letter, Carter to F. G. Smith	59657	13166
556	11/30/28	Letter, Hatch to Carter	59659	13167
557	12/18/28	Memo by Soubier	59661	13168
558	12/31/28	Letter, Carter to F. G. Smith	59667	13172
559	4/18/29	Letter, Carter to F. G. Smith	59668	13173
560	12/18/29	Letter, F. G. Smith to Carter	59670	13175
561	3/13/30	Letter, F. G. Smith to Carter	59671	13176A
562	3/19/30	Letter, Carter to F. G. Smith	59672	13177
563	3/17/30	Letter, Carter to Soubier	59673	13177
564	3/31/30	Letter, Carter to F. G. Smith	59675	13179
565	8/25/32	Contract between Peter Kucera and Hartford-Empire Co	17745	9103
566	8/26/32	Assignment, Peter Kucera to Hartford-Empire Co	17757	9108
567	5/21/35	Memo by Williams	59676	13180
568	9/30/35	Contract—General License from Owens-Illinois Glass Co. et al to Hartford-Empire Co	17758	9109
569	10/ 1/35	Contract—General License from Hartford-Empire Co. to Owens-Illinois Glass Co	17764	9113
570	1/ 1/36	Contract—Amendment to General License from Hartford-Empire Co. to Owens-Illinois Glass Co. (Ex. 569)	17779	9124

Exhibit Number	Date	Description	Original	Print
571	10/ 1/35	Contract—Suction Inventions License Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co	17781	9125
572	10/ 3/35	Contract — License Agreement between Owens-Illinois Glass Co. and Hazel-Atlas Glass Co.	17789	9128
572A	10/ 3/35	Contract—Schedule C of Ex. 572.	17809	9141
573	9/29/35	Contract—Second Amendment to Supplemental Agreement between Hartford-Empire Co. and Hazel-Atlas Glass Co. (Ex. 143).	17854	9181
574	4/19/22	Extract from Minutes of Executive Committee of Hartford-Fairmont Co	59678	13181
575	10/23/34	Letter, F. G. Smith to A. Houghton	59684	13186
576	12/11/34	Letter, F. G. Smith to A. Houghton	59685	13187
577	12/26/34	Memo, F. G. Smith to Falck and Houghton	59686	13188
578	10/ 1/35	Contract — Consolidated Feeder and Former License and Lease, between Owens-Illinois Glass Co. and Hartford-Empire Co.	17860	9187
579	10/ 1/35	Contract — Consolidated Stacker and Conveyer Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co	17889	9206
580	10/ 1/35	Contract — Consolidated Lehr Agreement between Hartford-Empire Co. and Owens-Illinois Co	17905	9213
581	10/ 2/35	Contract between Owens-Illinois Glass Co. and Hartford-Empire Co. re Libbey Co	17933	9232
582	5/ 7/28	Letter, G. F. Collins to F. G. Smith	59690	13192
583	12/31/29	Letter, Carter to F. G. Smith	59692	13195
584	10/ 7/30	Letter, F. G. Smith to W. E. Levis	59694	13196
585	10/11/30	Letter, W. E. Levis to F. G. Smith	59697	13198
586	1/28/31	Letter, G. F. Collins to F. G. Smith	59699	13200
587	4/ 9/32	Letter, W. E. Levis to F. G. Smith	59701	13202

Exhibit Number	Date	Description	Original	Print
588	1/11/33	Letter, Beatty to F. G. Smith	59702	13206
589	1/16/33	Letter, McNash to F. G. Smith	59704	13205
590	6/16/33	Letter, F. G. Smith to Curtiss	59705	13206
591	10/27/34	Letter, Dorsey to F. G. Smith	59706	13206
592	10/26/39	Letter, Olmstead to F. G. Smith	59712	
593	11/14/39	Letter, Slater to Pease	59713	
594	11/16/39	Letter, Pease to Slater	59714	
595	9/19/36	Letter, Aiken to Pease	59715	
596	11/ 3/36	Letter, Pease to Aiken	59717	
597	12/27/40	Letter, Pease to Ahrens	59718	13210
598	8/25/32	Contract — Cancellation Agreement between Peter Kucera and Knox-O'Neill Co. et al	17940	9236
599	8/25/32	Letter Agreement, Hartford-Empire Co. and Underwood	17944	9238
600	7/ -/36	Comparative Statistics, Knox Glass Associates	59719	13211
601	12/ -/36	Comparative Statistics, Knox Glass Associates	59720	13212
602	12/ -/37	Comparative Statistics, Knox Glass Associates	59721	13213
603	12/ -/38	Comparative Statistics, Knox Glass Associates	59722	13214
604	4/ -/39	Comparative Statistics, Knox Glass Associates	59723	13215
605	5/ -/39	Comparative Statistics, Knox Glass Associates	59724	13216
606	6/ -/39	Comparative Statistics, Knox Glass Associates	59725	13217
607	2/ -/41	Comparative Statistics, Knox Glass Associates	59726	13218
608	2/21/22	Letter, Carter to Biggers	59727	13219
609	4/25/22	Memo, Carter to Blair	59731	13223
610	5/ 3/23	Letter, Carter to Blair	59735	13227
611	11/ 7/23	Memo by Carter	59737	13228
612	8/14/23	Letter, Carter to Blair	59738	13230
613	1/28/24	Letter, Carter to Blair	59745	13237
614	9/ 2/25	Memo by Brown and Rule	59748	13240
615	7/ 2/26	Letter, Carter to F. G. Smith	59749	13242
616	5/21/24	Letter, Carter to Baker	59751	13242
617	Undated	Schedule of dividends declared by Hartford - Empire Co., 1929–1940	59755	13244
618	5/27/24	Memo, unsigned	59758	13245
619	6/ 2/24	Letter, Carter to Baker	59760	13249
620	6/11/24	Memo by Carter	59767	13257
621	8/23/24	Letter, Carter to Bonhart	59769	13258

Exhibit Number	Date	Description	Original	Print
622	5/28/25	Letter, Carter to Baker	59773	13263
623	7/14/25	Letter, Carter to Baker	59776	13266
624	7/31/25	Letter, Carter to Baker	59777	13267
625	12/30/25	Memo, unsigned	59779	13269
626	5/ 6/26	Memo, unsigned	59782	13271
627	11/ 6/26	Memo, Carter to Operating Committee, Owens Bottle Co.	59788	13275
628	9/12/28	Memo by Carter	59789	13276
629	10/12/29	Letter, Lufkin to Carter	59793	13280
630	1/ 7/30	Memo, Carter to W. E. Levis	59796	13281
631	1/29/32	Letter, Carter to F. G. Smith	59801	13289
632	10/ 4/28	Letter, Carter to Boshart	59804	13292
633	10/ 4/28	Draft Letter, Carter to Brown	59806	13294
634	5/22/28	Letter, Carter to Boshart	59808	13295
635	7/17/28	Letter, Brown to Carter	59810	13296
636	7/23/28	Letter, Carter to Brown	59812	13297
637	6/ 4/26	Letter, Carter to Hatch	59813	13297
638	6/27/26	Letter, Clarke to McNerney	59814	13298A
639	6/10/26	Letter, Carter to Hatch	59815	13299
640	6/10/26	Letter, Carter to Clarke	59816	13300
641	5/25/32	Letter, Hatch to Carter	59817	13300A
642	5/28/32	Letter, Hatch to Carter	59818	13300B
643	8/ 8/24	Letter, Carter to F. G. Smith	59819	13301
644	5/ 4/25	Letter, Carter to Boshart	59822	13303
645	12/ 6/30	Letter, Carter to W. E. Levis	59825	13306
646	2/ 6/33	Telegram, Carter to C. B. Belknap	59828	13310A
647	2/ 6/33	Telegram, C. B. Belknap to Carter	59829	13310B
648	4/24/25	Letter, Carter to Boshart	59830	13311
649	5/16/25	Letter, Carter to Boshart	59832	13313
650	9/10/25	Letter, Carter to Boshart	59835	13316
651	10/23/30	Letter, Carter to F. G. Smith	59839	13320
652	10/27/30	Letter, F. G. Smith to Carter	59840	
653	10/24/30	Letter, Carter to W. E. Levis	59841	
654	12/20/30	Letter, Carter to F. G. Smith	59842	13321
655	8/29/24	Letter, Brown to C. T. Milans	59843	13322
656	6/21/27	Letter, Carter to Brown	59845	13324
657	7/ 6/27	Letter, Brown to Carter	59849	13325
658	7/ 8/27	Letter, Carter to Brown	59851	31326A
659	7/ 8/27	Letter, Carter to C. F. Miller	59852	13327
660	7/11/27	Letter, Brown to Carter	59853	13327
661	7/18/27	Letter, Carter to Brown	59854	13328
662	12/26/28	Letter, Carter to F. G. Smith	59857	13330
663	7/30/29	Letter, Carter to W. E. Levis	59859	13323
664	8/12/32	Letter, Carter to F. G. Smith	59861	13334
665	5/10/29	Letter, Carter to W. E. Levis	59862	13334A
666	8/ 5/29	Letter, Eldred to Carter	59864	13334

Exhibit Number	Date	Description	Original	Print
667	8/ 9/29	Letter, Carter to Eldred	59866	13335
668	8/13/29	Letter, Eldred to Carter	59867	13336A
669	12/ 6/29	Letter, Eldred to Carter	59868	13337
670	12/11/29	Letter, Carter to Eldred	59871	13339
671A	9/24/30	Letter, Williams to Owens-Illinois Glass Co.	59872	
671B	9/18/30	Letter, H. K. Smith to Williams	59873	13339
672	9/15/36	Letter, Carter to C. B. Belknap	59875	13341
673	10/11/19	Letter, Falck to F. G. Smith	59877	13342
674	3/ 6/20	Letter, Falck to F. G. Smith	59879	13344
675	3/10/20	Letter, F. G. Smith to Falck	59883	13347
676	6/ 8/20	Letter, Falck to F. G. Smith	59885	13348
677	10/30/20	Letter, Dorsey to Falck	59890	13351
678	2/28/21	Letter, Falck to F. G. Smith	59893	
679	11/ 5/21	Letter, Dorsey to Falck	59897	13353
680	6/ 2/22	Letter, Falck to F. G. Smith	59900	13356
681	9/16/22	Letter, Dorsey to Falck	59901	13357
682	7/ 1/25	Memo by Falck	59903	13358
683	5/31/24	Letter, Flack to F. G. Smith	59906	13361
684	5/27/24	Letter, F. G. Smith to Falck	59908	13363
685	6/ 6/24	Letter, F. G. Smith to Falck	59909	13364
686	5/ -/24	Letter, F. G. Smith to Baker	59910	13365
687	12/24/25	Letter, Falck to Dorsey	59911	13366
688	12/28/25	Letter, F. G. Smith to Falck	59913	13369
689	1/25/26	Letter, Dorsey to Falck	59915	13370
690	6/ 7/26	Letter, Falck to McAbee	59921	13374
691	7/22/26	Letter, Curtiss to McAbee	59922	13375
692	1/27/26	Letter, Falck to Dorsey	59923	13376
693	4/24/26	Letter, Falck to F. G. Smith and Dorsey	59925	13378
694	4/22/26	Memo, unsigned, enclosed with Ex. 693	59926	13379
695	6/25/26	Memo, Falck to Burrows, Frech and Cross	59933	13384
696	11/22/26	Memo, Falck to Sullivan et al	59939	13389
697	1/ 3/27	Letter, F. G. Smith to Falck	59941	13391
698	1/10/27	Letter, Dorsey to Falck	59943	13392
699	3/ 2/27	Letter, Falck to H. K. Smith	59945	13394
700	3/ 4/27	Letter, H. K. Smith to Falck	59948	13397
701	12/10/27	Memo by H. K. Smith	59950	
702	6/ 7/28	Letter, Falck to Kimble	59952	13398
703	6/27/29	Letter, F. G. Smith to Falck	59954	13400
704	7/10/29	Letter, Falck to H. K. Smith	59957	
705	6/ 6/27	Letter, F. G. Smith to Falck	59960	13402
706	12/ 8/37	Letter, A. Houghton to Falck	59962	13403
707	6/20/33	Memo, Falck to F. G. Smith	59963	13403

Exhibit Number	Date	Description	Original	Print
708	6/27/33	Memo marked "By C. B. Belknap"	59966	13406
709	10/ 5/38	Memo by Parham	59969	13409
710	10/17/33	Letter, F. G. Smith to Reed	59972	13412
711	11/ 2/33	Letter, F. G. Smith to Falek	59974	
712	4/15/39	Letter, F. G. Smith to Curtiss	59975	
713	4/21/39	Letter, F. G. Smith to Curtiss	59976	
714	12/ 1/39	Letter, Curtiss to Eldred	59978	
715	4/22/38	Letter, Wright to C. B. Belknap	59979	13413
716	7/14/32	Letter, C. B. Belknap to Carter	59980	13414
717	6/21/24	Letter, C. B. Belknap to Dorsey	59982	31416
718	7/ 9/25	Letter, C. B. Belknap to Baker	59985	13419
719	12/24/30	Letter, C. B. Belknap to F. G. Smith	59988	13422
720	5/27/33	Letter, W. E. Levis to F. G. Smith	59989	13423
721	6/13/33	Letter, F. G. Smith to W. E. Levis	59990	13424
722	7/21/33	Memo, C. B. Belknap to W. E. Levis	59991	
723	1/21/33	Letter, C. B. Belknap to F. G. Smith	59992	13424A
724	1/23/30	Letter, C. B. Belknap to Carter	59993	13424B
725	1/23/30	Letter, C. B. Belknap to Tatum	59994	13425
726	1/21/30	Letter, F. G. Smith to C. B. Belknap	59995	13426A
727	1/24/30	Memo by Carter	59996	
728	1/24/30	Letter, C. B. Belknap to Carter	59997	13427
729	5/26/33	Letter, Parham to C. B. Belknap	59998	13428A
730	6/ 1/33	Letter, F. G. Smith to C. B. Belknap	59999	
731	6/ 3/33	Letter, Laughlin to C. B. Belknap	60000	13428B
732	7/30/24	Letter, C. B. Belknap to Baker	60001	13429
733	6/19/34	Letter, Safford to G. F. Collins	60003	
734	6/21/34	Letter, G. F. Collins to Safford	60005	13430A
735	9/13/34	Letter, Safford to G. F. Collins	60006	13431
736	9/15/34	Memo, Pease to F. G. Smith	60007	13431
737	10/21/35	Letter, Haberlin to Pease	60008	13432A
738	10/24/35	Letter, Pease to Haberlin	60009	13433
739	9/20/30	Contract—License and Lease No. HL-145, Hartford-Empire Co. to Swindell Bros., Inc.	17945	9239
740	9/16/29	Contract—License and Lease No. HL-106, Hartford-Empire Co. to Swindell Bros., Inc.	17972	9244
741	6/16/33	Letter, F. G. Smith to C. B. Belknap	60010	13434A
741A	6/15/33	Letter, Tatum to F. G. Smith	60011	13435
742	8/ 2/33	Letter, Parham to C. B. Belknap	60012	

Exhibit Number	Date	Description	Original	Print
743	8/21/33	Memo, W. E. Levis to Phillippe	60013	13435
744	9/22/33	Memo, W. E. Levis to Phillippe	60014	13436
745	10/ 9/33	Memo, C. B. Belknap to W. E. Levis	60015	13437
746	10/ 9/33	Memo, C. B. Belknap to W. E. Levis	60016	13438
747	10/20/33	Letter, Parham to C. B. Belknap	60017	13440A
748	10/23/33	Letter, C. B. Belknap to Parham	60019	
749	6/11/36	Letter, Werbe to C. B. Belknap	60020	13441
750	6/17/36	Letter, C. F. Miller to Werbe	60021	13441
751	10/21/37	Letter, Carter to Bailey	60022	13442
752	10/22/37	Letter, Lynch Corp. to Owens-Illinois Glass Co.	60023	13443
753	12/15/37	Letter, C. B. Belknap to Werbe	60024	13442
754	12/17/37	Letter, Werbe to C. B. Belknap	60025	13444
755	11/ 3/33	Telegram, C. B. Belknap to W. E. Levis	60026	13444A
756	11/28/34	Letter, Wade to C. B. Belknap	60027	13444B
757	12/ 5/34	Letter, C. B. Belknap to Wade	60028	13445
758	4/12/37	Letter, Foringer to C. B. Belknap	60029	
759	11/ 2/34	Letter, Brown to C. B. Belknap	60030	
760	11/ 7/34	Letter, C. B. Belknap to Brown	60031	
761	Undated	Memo, unsigned, re Tucker, Reeves & Beatty	60032	13445
762	12/28/35	Letter, C. B. Belknap to F. G. Smith	60033	13446
763	1/ 4/36	Letter, F. G. Smith to C. B. Belknap	60034	13447
764	12/ 3/34	Letter, Parham to C. B. Belknap	60035	13448A
765	12/10/34	Letter, Parham to Martin	60036	13448B
766	12/12/34	Letter, Martin to Parham	60038	13449
767	12/27/34	Letter, Martin to Parham	60039	13449
768	12/31/34	Letter, Parham to Martin	60041	13450A
769	12/22/36	Letter, Parham to C. B. Belknap	60042	13451
770	7/21/37	Letter, Dorsey to A. Houghton	60043	
771	5/22/39	Letter, Curtiss to C. B. Belknap	60044	13451
772	5/17/39	Memo, Knight to Curtiss	60045	13452
773	6/24/39	Letter, C. B. Belknap to Curtiss	60046	13452A
774	8/14/39	Letter, C. B. Belknap to Curtiss	60047	
775	Undated	Memo, signed "W. E. L."	60048	13453
776	12/31/31	Letter, McNash to W. E. Levis	60050	13454
777	1/20/31	Excerpt from report by W. E. Levis to Owens directors	60052	13455
778	4/ 8/26	Excerpt from diary of H. K. Smith	60053	13456
779	8/ 8/29	Excerpt from diary of H. K. Smith	60054	
780	5/28/32	Telegram, Glacken to W. E. Levis	60055	13456

Exhibit Number	Date	Description	Original	Print
781	Undated	Financial schedule, Owens-Illinois Glass Co. and subsidiaries	60056	13458
782	9/10/40	Stipulation between U. S. and Owens-Illinois Glass Co.	15091	7929
783	8/ 2/32	Letter, W. E. Levis to R. H. Levis.	60057	13459
784	9/ 2/32	Letter, W. E. Levis to Laupp	60060	13461
785	9/ 9/32	Letter, W. E. Levis to McNash	60061	
786	9/12/32	Letter, McNash to W. E. Levis	60062	
787	9/10/32	Letter, F. G. Smith to Mandeville.	60063	
788	7/11/34	Telegram, G. F. Collins to Safford.	60064	
789	4/29/35	Contract—License and Lease Agreement between Hartford-Empire Co. and Knape-Coleman Glass Co.	17999	9245
790	4/29/35	Bill of Sale, Knape-Coleman Glass Co. to Hartford-Empire Co.	18011	9248
791	8/26/35	Letter, Niver to Dugan	60065	13465
792	8/27/35	Letter, Dugan to Niver	60066	13466
793	6/ 1/36	Letter, Dugan to Niver	60068	13467
794	6/ 2/36	Letter, Dugan to Mandeville	60069	13468
795	4/25/38	Letter, Dugan to Mandeville	60071	13470
796	7/13/38	Letter, Dugan to Niver	60073	13472
797	7/14/38	Letter, Niver to Dugan	60074	13472
798	12/12/32	Letter, Rieman to Holland & Armstrong	60075	
799	9/25/33	Letter, Rieman to Anchor Co.	60076	13473
800	1/ 5/33	Letter, Rieman to Anchor Co.	60077	13473
801	3/31/33	Letter, Rieman to Eldred	60078	13474
802	9/20/33	Letter, Safford to Capstan Glass Co.	60079	13475
803	9/23/33	Letter, Lynch Corp. to Capstan Glass Co.	60083	13478
804	6/ 9/33	Letter Agreement between Hartford-Empire Co. and Capstan Glass Co.	18014	9250A
805	10/12/33	Letter Agreement between Hartford-Empire Co. and Capstan Glass Co.	18015	9250B
806	5/ 1/34	Contract between Hartford-Empire Co. and Capstan Glass Co.	18017	9251
807	8/ 1/35	Letter, Rieman to Holland & Armstrong	60085	
808	2/17/26	Contract — General Agreement, Capstan Glass Co. and Hartford-Empire Co.	18023	9253
809	7/ 3/35	Letter, Rieman to Anchor Co.	60087	13478
810	10/21/35	Letter, Rieman to Anchor Co.	60091	13479

Exhibit Number	Date	Description	Original	Print
811	7/15/35	Letter, Rieman to Anchor Co.	60093	13480
812	11/21/32	Letter, Rieman to Anchor Co.	60095	13481
813	11/26/32	Letter, Rieman to Anchor Co.	60096	
814	12/ 3/32	Letter, Rieman to Anchor Co.	60097	
815	7/27/34	Letter, W. E. Levis to Rieman	60100	13482
816	8/ 2/34	Letter, W. E. Levis to Rieman	60102	
817	9/15/32	Letter, W. E. Levis to McNash	60103	13483
818	5/24/33	Letter, F. G. Smith to W. E. Levis	60104	13484
819	7/ 1/33	Letter, W. E. Levis to R. H. Levis	60107	13485
820	7/ 6/33	Letter, W. E. Levis to R. H. Levis	60108	13486
821	7/ 6/33	Letter, McNash to W. E. Levis	60109	
822	7/10/33	Letter, W. E. Levis to McNash	60110	
823	10/16/33	Letter, McNash to Miedel	60110	13487
824	8/ 2/34	Letter, W. E. Levis to R. H. Levis	60112	13488
825	8/29/34	Letter, W. E. Levis to R. H. Levis	60113	13490
826	11/24/34	Letter, W. E. Levis to R. H. Levis	60114	13491
827	4/ 1/25	Letter, W. E. Levis to R. H. Levis	60115	13492
828	2/ 1/35	Letter, W. E. Levis to R. H. Levis	60116	13493
829	2/ 6/35	Letter, W. E. Levis to R. H. Levis	60117	13494
830	2/12/35	Letter, W. E. Levis to Mandeville	60118	
831	2/14/35	Letter, W. E. Levis to McNash	60119	13496
832	2/16/35	Letter, W. E. Levis to McNash	60120	13497
833	8/ 8/35	Letter, W. E. Levis to Mandeville	60121	13498
834	7/25/36	Letter, W. E. Levis to R. H. Levis	60122	13499
835	9/ 9/36	Letter, Mandeville to W. E. Levis	60123	13500
836	5/ 6/33	Memo, Safford to F. G. Smith	60124	
837	9/12/34	Memo, W. E. Levis to Boeschenstein	60125	13501
838	12/11/29	Memo, Carter to W. E. Levis	60126	
839	3/26/31	Memo, W. E. Levis to Carter	60131	13502
840	6/ 4/31	Memo, Carter to W. E. Levis	60132	13502B
841	5/11/34	Letter, Collin to Werbe	60134	13503
842	5/16/34	Letter, Wrebe to Collin	60135	13504
843	3/27/33	Letter, W. E. Levis to F. G. Smith	60136	13504
844	10/21/29	Letter, Mandeville to Griffis	60137	13505
845	5/ 6/30	Letter, Tips to Mandeville	60139	13506
846	8/15/30	Letter, Mandeville to W. E. Levis	60141	
847	10/16/30	Memo by W. E. Levis	60142	13508
848	11/ 4/30	Letter, Mandeville to W. E. Levis	60144	13510
849	11/ 6/30	Letter, W. E. Levis to Mandeville	60145	13511
850	11/10/30	Letter, Mandeville to W. E. Levis	60146	13511
851	11/ 1/34	Letter, W. E. Levis to Mandeville	60148	13512
852	10/30/35	Letter, W. E. Levis to R. H. Levis	60150	13514
853	11/ 1/35	Letter, W. E. Levis to R. H. Levis	60151	13515
854	4/ 2/36	Letter, W. E. Levis to Stewart	60153	13518
855	4/ 2/36	Letter, W. E. Levis to Stewart	60154	
856	6/26/36	Letter, W. E. Levis to Carr	60155	

Exhibit Number	Date	Description	Original	Print
857	6/29/36	Letter, Carr to W. E. Levis	60156	
858	7/ 1/36	Letter, W. E. Levis to Carr	60157	
859	5/24/37	Letter, W. E. Levis to Stewart	60158	
860	6/ 4/37	Letter, W. E. Levis to Stewart	60159	
861	8/18/37	Letter, W. E. Levis to B. H. Levis	60160	13519
862	12/ 9/30	Letter, Williams to W. E. Levis	60161	13521
863	1/13/33	Letter, W. E. Levis to F. G. Smith	60166	13527
864	12/16/33	Memo, Phillipps to W. E. Levis	60167	13527
865	12/18/33	Memos, W. E. Levis to Boeschenstein	60169	13528
866	7/12/34	Letter, Floan to W. E. Levis	60172	
867	7/17/34	Letter, W. E. Levis to Floan	60173	
868	8/ 4/34	Letter, Floan to W. E. Levis	60174	
869	8/ 6/34	Letter, W. E. Levis to Floan	60175	
870	8/ 9/34	Letter, Floan to W. E. Levis	60176	
871	8/11/34	Letter, W. E. Levis to Floan	60177	
872	5/11/39	Letter, Laughlin to W. J. Belknap	60178	13531
873	10/ 9/39	Letter, Bracken to Brown	60180	13532
874	12/10/34	Letter, Martin to Sparks Construction Co	60181	13533
875	6/25/34	Letter, Martin to Mrs. Len Smith	60182	13533
876	6/14/34	Letter, Mrs. Len Smith to Owens-Illinois Glass Co	60183	13534
877	11/30/34	Letter, Sparks Construction Co. to Owens Bottle Co	60184	13534
878	1/15/35	Contract between Owens-Illinois Glass Co. and Soubier	18066	9276
879	6/10/20	Memo, M. J. Owens to Owens Executive Committee	60185	13534
880	1/19/22	Letter, H. K. Smith to Blair	60186	13536A
881	1/24/22	Telegram, Blair to H. K. Smith	60187	
882	2/21/22	Letter, Biggers to Williams	60188	13536B
882A	2/ 8/22	Memo, unsigned	60189	
883	3/11/22	Letter, Williams to Biggers	60192	
884	3/20/22	Telegram, Blair to F. G. Smith	60198	
885	3/ -/22	Memo, unsigned	60199	13537
886	3/ -/22	Memo, unsigned	60201	13538
887	6/ 1/22	Report, Blair and Biggers to Owens directors	60203	13540
888	6/ 3/22	Letter, H. K. Smith to Blair	60204	13541
889	10/24/22	Letter, Biggers to Ashcraft	60207	13544
890	11/16/22	Letter, Ashcraft to Biggers	60209	13546
891	6/ 4/23	Report, Blair and Biggers to Owens directors	60214	13551
892	10/10/23	Memo, Blair to Owens directors	60216	13552
893	3/17/24	Report, Biggers and Baker to Owens Executive Committee	60217	13553

Exhibit Number	Date	Description	Original	Print
894	4/ 9/24	Report, Blair to Owens directors..	60219	13556
895	5/29/20	Memo by Walbridge and Baker..	60221	13557
897	4/28/22	Memo, Rowley to Baker.....	60222	
898	11/ 3/24	Letter, F. G. Smith to Baker.....	60223	
899	1/10/25	Memo, Baker to Owens Executive Committee.....	60225	
900	1/22/25	Memo, Baker to Owens directors.	60227	13559
901	9/15/25	Memo, unsigned.....	60228	
902	11/ 6/25	Report, Baker to Owens directors et al.....	60230	13560
903	3/ 3/28	Letter, J. C. Brady to A. M. Algeo.....	60232	13562
904	10/ 1/28	Letter, McNash to Philbin.....	60235	
905	10/ 3/28	Letter, Philbin to McNash.....	60236	
906	10/18/28	Letter, McNash to Philbin.....	60237	
907	1/ 8/30	Letter, Ackerman to McNash....	60238	13566
908	1/11/30	Letter, McNash to Ackerman....	60239	13567
909	5/20/09	Contract — License Agreement between Owens Bottle Machine Co. et al. and Hazel-Atlas Glass Co. (See Ex. 0-5208).....	18068	9278
910	9/23/24	Letter, J. C. Brady to Owens Bottle Co.....	60240	13567
911	9/29/24	Letter, Boehart to J. C. Brady...	60241	13568
912	8/ 2/30	Letter, McNash to A. M. Algeo....60242		13569
913	10/ 2/30	Letter, Bowman to Standard Glass Co.....	60244	13570
914	10/ 3/30	Letter, Philbin to A. M. Algeo...	60247	
915	3/11/31	Letter, McNash to Philbin.....	60248	13572
916	3/13/31	Letter, Philbin to McNash.....	60249	
917	5/12/31	Letter, Bowman to Amsler-Morton Co.....	60251	
918	9/22/31	Memo of Statistics, unsigned....	60252	13573
919	8/ 6/32	Letter, McNash to Safford.....	60254	13574
920	8/ 9/32	Letter, Pease to McNash.....	60255	13574
921	9/16/32	Letter, Safford to McNash.....	60256	13575
922	9/30/32	Letter, McNash to F. G. Smith..	60257	13575
923	10/ 5/32	Letter, McNash to Bowman.....	60258	13576
924	10/12/32	Letter, F. G. Smith to McNash..	60259	13577
925	10/14/32	Letter, McNash to F. G. Smith..	60260	13577
926	10/14/32	Letter, McNash to F. G. Smith..	60261	13578
927	10/17/32	Letter, F. G. Smith to McNash..	60262	13578
928	12/ 9/32	Letter, Miedel to McNash.....	60263	13579
929	5/10/32	Minutes of Hazel-Atlas Executive Committee Meeting.....	60266	13581
930	5/17/32	Minutes of Hazel-Atlas Executive Committee Meeting.....	60267	13582

Exhibit Number	Date	Description	Original	Print
931	8/11/32	Receipt, Clarke to Hartford-Empire Co	60268	13584A
932	8/11/32	Contract between Hartford-Empire Co. and William P. Clarke	18075	9278
933	2/11/28	Letter, A. M. Algeo to Philbin	60269	
934	12/28/32	Letter, Saperston to Hazel-Atlas Glass Co	60271	13585
935	12/29/32	Letter, McNash to Saperston	60272	
936	3/28/28	Contract between Brockway Machine Bottle Co. and Kearns-Gorsuch Bottle Co. et al	18076	9279
937	12/31/32	Letter, Philbin to Brown	60273	13586
938	12/31/32	Letter, Philbin to Saperston	60274	13586
939	1/ 5/33	Letter, Philbin to Brown	60275	13587
940	1/ 5/33	Letter, Philbin to Saperston	60276	13587
941	12/19/32	Letter, Miedel to McNash	60278	13589
942	12/27/32	Letter, McNash to F. G. Smith	60279	13589
943	12/31/32	Letter, McNash to Miedel	60280	13590
944	9/ 1/32	Letter, McNash to W. E. Levis	60281	13591
945	3/14/33	Letter, Marsh to Hazel-Atlas Glass Co	60283	13592
946	8/31/40	Stipulation between U. S. and Hazel-Atlas Glass Co	15103	7931
947	Undated	Memo of fruit jar production, 1928–1939	60284	13593
948	5/15/33	Letter, McClure to McNash	60285	13593
949	3/20/33	Memo by McNash	60286	13594
950	6/22/33	Letter, McClure to Eldred	60287	13595
951	1/16/33	Letter, McNash to Philbin	60288	13596
952	5/26/33	Memo by McNash	60290	13598
953	7/19/33	Letter, W. J. Belknap to F. G. Smith	60291	13599
954	9/11/33	Memo, Miedel to McNash	60294	13601
955	10/ 3/33	Minutes of meeting of Hazel-Atlas directors	60295	13602
956	9/16/33	Letter, Miedel to McNash	60296	13603
957	11/ 33/3	Letter, Lynch Corp. to Hazel-Atlas Glass Co	60298	13605
958	10/11/25/35	Excerpts from Minutes of meetings of Hazel-Atlas directors	60299	13605
959	3/28/36	Letter, Miedel to McNash	60300	13607
960	10/ 6/36	Letter, Bowman to McNash	60302	13608
961	1/ 8/37	Letter, Philbin to McNash	60303	
962	1/11/37	Letter, McNash to Philbin	60306	
963	4/14/33	Option, Edward Miller to Williams-Hatch & Co., etc	18078	9280
964	5/18/33	Letter, Collin to Williams	60307	13608

Exhibit Number	Date	Description	Original	Print
965	5/29/30	Letter, A. M. Algeo to McNash..	60311	13612
966	6/ 6/30	Letter, McNash to A. M. Algeo..	60312	13613
967	12/23/31	Letter, F. C. Ball to McNash....	60313	13613
968	12/30/31	Letter, McNash to F. C. Ball....	60314	13614
969	9/14/28	Memo, Quay to Metzner.....	60315	
970	9/21/31	Contract — License and Lease No. A, Hartford-Fairmont Co. to Kearns-Gorsuch Bottle Co....	18082	9284
971	12/28/26) 5/31/27)	Excerpts from Minutes of meetings of Hazel-Atlas directors,...	60316	
972	7/26/27) 9/27/27)	Excerpts from Minutes of meetings of Hazel-Atlas directors...	60317	
973	Undated	Stipulation between U. S. and Hartford-Empire Co., Lists of patents and interferences.....	15162	7984
973A	Undated	Supplement to stipulation Ex. 973	15239	8034
974	1/24/34	Letter, F. G. Smith to W. E. Levis.....	60318	13615
975	5/ 9/32	Letter, McNash to F. G. Smith..	60319	
976	5/14/32	Telegram, F. G. Smith to McNash	60320	
977	6/28/32	Letter, F. G. Smith to McNash..	60321	13616
978	7/ 2/32	Letter, Cornwall to McNash.....	60323	13616C
979	10/ 7/32	Petition of Hartford-Empire Co. United States Supreme Court for certiorari, Nos. 438, 439, 440, Oct. Term, 1932.....	60325	
980	Undated	Brief for Lamb Glass Co., respondent, in No. 440, Oct. Term, 1932.....	60335	13618
981	10/ 8/32	Petition of Lamb Glass Co. to United States Supreme Court for certiorari, No. 443, Oct. Term, 1932.....	60341	13622
982	10/28/32	Brief for Kearns-Gorsuch Bottle Co., respondent, in No. 439, Oct. Term, 1932.....	60376	13649
983	11/11/32	Memorandum as to settlement between petitioner and respondent in No. 440, Oct. Term, 1932.	60380	13651
984	6/30/32	Letter, McNash to F. G. Smith..	60384	
985	8/10/31	Contract between Peter Kucera and Knox-O'Neill Co.....	18117	9284
986	8/11/31	Contract between Peter Kucera and McKee Glass Co.....	18124	9291
987	4/26/32	Letter Agreement, Peter Kucera and Knox-O'Neill Co.....	18129	9295
988	5/18-21/34	Pencil notes by Fingold.....	60385	

Exhibit Number	Date	Description	Original	Print
989	8/25/32	Letter, Safford to Knox-O'Neill Co	60386	13653
990	9/14/33	Letter, Kucera to Peiler	60387	13653
991	9/18/33	Letter, Peiler to Kucera	60389	13655
992	10/ 4/33	Letter, Eldred to Kucera	60391	13656
993	8/24/33	Letter, Davis to Kucera	60394	13658
994	10/ 2/35	Letter, Parham to Kucera	60395	13659
995	12/27/40	Letter, Binder to Hartford-Empire Co	60397	13660
996	12/30/40	Letter, Pease to Binder	60398	13660
997	11/30/33	Letter, Floan to Hartford-Empire Co	60399	13661
998	12/ 5/33	Letter, Safford to Floan	60400	13662
999	12/ 7/33	Letter, Floan to Safford	60402	
1000	5/20/21	Contract between Hazel - Atlas Glass Co. and Owens Bottle Co.	18131	9297
1001	2/ 6/31	Letter, Lynch Corp. to Hartford-Empire Co	60403	13662C
1002	2/ 9/31	Letter, F. G. Smith to Lynch Corp	60404	13663
1003	9/ 3/31	Letter, F. G. Smith to Lynch Corp	60406	13664
1004	3/19/32	Letter, Parham to Lynch Corp	60408	13665
1005	6/17/31	Letter, Werbe to Barnard	60409	13665
1006	6/23/31	Letter, Barnard to Werbe	60410	13666
1007	6/24/31	Letter, Werbe to Barnard	60411	13667
1008	6/10/29	Letter, F. G. Smith to Werbe	60412	13668
1009	6/12/29	Letter, Werbe to F. G. Smith	60413	13668
1010	6/25/29	Telegram, Werbe to Eldred	60414	13670A
1011	6/25/29	Telegram, Eldred to Werbe	60415	13670B
1012	5/15/31	Letter, F. G. Smith to Werbe	60416	13671
1013	5/ 3/32	Letter, Werbe to Hartford-Empire Co	60417	13671
1014	5/ 6/32	Letter, Parham to Lynch Corp	60418	13672
1015	5/24/32	Letter, Parham to Werbe	60419	13672
1016	6/ 1/32	Telegram, Werbe to F. G. Smith	60420	
1017	6/ 1/32	Telegram, F. G. Smith to Werbe	60421	
1018	6/ 1/32	Telegram, Werbe to F. G. Smith	60422	
1019	6/20/32	Letter, F. G. Smith to Werbe	60423	13673
1020	3/ 3/33	Letter, Brown to Werbe	60424	13674
1021	3/ 7/33	Letter, Werbe to Brown	60425	13675
1022	3/10/33	Telegram, Brown to Werbe	60426	13676A
1023	3/22/33	Letter Agreement, Amsler-Morton Co., Lynch Corp. and Container Service Corp.	18135	9299
1024	4/20/33	Letter, Werbe to Rice	60427	13677
1025	4/20/33	Letter, Brown to Werbe	60428	13677
1026	5/ 4/33	Letter, Werbe to Rice	60429	13678

Exhibit Number	Date	Description	Original	Print
1027	5/ 8/33	Letter, Werbe to Bailey & Sharp Co.	60430	13679
1028	7/ 1/33	Telegram, Watts to Fisher	60431	
1029	7/ 3/33	Telegram, Lynch Corp. to Hartford-Empire Co.	60432	13680
1030	7/ 4/33	Telegram, Werbe to Bridges	60433	13681
1031	7/10/33	Telegram, Bridges to Werbe	60434	13682A
1032	7/11/33	Telegram, Bridges to Werbe	60435	13682B
1033	9/ 9/33	Minutes of Meeting of Lynch directors	60436	13683
1034	8/22/33	Letter, Werbe to Connelley Glass Co.	60446	13688
1035	8/30/33	Letter, Safford to Wrebe	60447	13688
1036	9/ 1/33	Letter, Bridges to Eldred	60449	
1037	8/10/33	Telegram, Bridges to Lynch Corp.	60450	
1038	9/ 2/33	Letter, C. F. Miller to Lynch Corp.	60451	13689
1039	9/ 2/33	Letter, Werbe to Safford	60453	
1040	9/11/33	Letter, Doll to Watts	60454	
1041	9/15/33	Letter, Werbe to Doll	60455	13691
1042	9/21/33	Letter, Werbe to C. F. Miller	60456	13691
1043	9/22/33	Letter, Safford to Werbe	60457	13692
1044	9/26/33	Letter, Werbe to Doll	60459	13693
1045	9/26/33	Letter, Werbe to Safford	60460	13694A
1046	9/27/33	Letter, Werbe to Doll	60461	13695
1047	10/ 3/33	Letter, Werbe to Finckel & Finckel	60462	
1048	10/16/33	Letter, Werbe to Morton	60463	
1049	11/ 8/33	Letter, Morton to Werbe	60464	
1050	10/20/33	Letter, Werbe to Underwood	60465	13696
1051	10/25/33	Letter, Werbe to Doll	60466	
1052	12/22/33	Letter, Werbe to Safford	60467	13696
1053	12/28/33	Letter, Macbeth to Doll	60468	13697
1054	1/ 5/34	Letter, Watts to Doll	60470	13699
1055	1/ 6/34	Letter, Werbe to Eldred	60471	13699
1056	1/24/34	Letter, Eldred to Werbe	60472	13701
1057	1/27/34	Letter, Werbe to Eldred	60475	13703
1058	1/27/34	Letter, Werbe to Safford	60476	13704
1059	1/29/34	Letter, Eldred to Werbe	60477	13706
1060	1/24/34	Letter, Safford to Werbe	60478	13707
1060A	1/23/34	Memo re Lynch machines and license requirements	60480	13708
1061	1/27/34	Letter, Werbe to Safford	60483	13710
1062	2/ 8/34	Letter, Davis to Doll	60484	13711
1063	2/10/34	Letter, Doll to Werbe	60485	
1064	2/12/34	Letter, Safford to Werbe	60486	13712
1065	2/16/34	Letter, Werbe to Davis	60488	13712
1066	2/28/34	Letter, Werbe to Hocking Glass Co.	60489	

Exhibit Number	Date	Description	Original	Print
1135A	Undated	Balance sheets of Monongah Glass Co., 1925–1927	60574	13765
1136	12/30/30	Excerpt from diary of H. K. Smith.	60575	
1137	6/22/31	Letter, Walker to F. G. Smith	60576	
1138	6/24/31	Letter, F. G. Smith to Walker	60579	
1139	7/16/31	Letter, Walker to I. J. Collins	60580	13766A
1140	2/11/31 7/ 8/31)	Contract between Thatcher Mfg. Co., Hocking Glass Co. and Hartford-Empire Co.	18141	9303
1141	7/13/31)	Excerpts from diary of H. K. Smith	60582	13767
1142	8/20/31	Letter, Mandeville to Griffis	60583	13768A
1143	9/ 5/31	Letter, Fulton to Niver	60585	
1144	9/ 9/31	Letter, Fulton to Niver	60586	
1145	10/28/31	Letter, Fulton to Niver	60587	
1146	12/11/31	Letter, Thatcher Mfg. Co. to General Glass Corp.	60588	
1147	12/30/31	Letter, Mandeville to I. J. Collins.	60589	13768C
1148	4/27/32	Letter, Fulton to F. L. Collins	60591	
1149	7/13/32	Letter, Macbeth to I. J. Collins	60592	
1150	7/13/32	Letter, Macbeth to Robinson	60593	
1151	10/21/32	Letter, Macbeth to I. J. Collins	60594	13769
1152	10/31/32	Letter, F. G. Smith to Macbeth	60595	13769
1153	7/20/32	Letter, Mandeville to I. J. Collins	60597	13771
1154	7/25/32	Letter, I. J. Collins to Dollison	60598	13771
1155	7/28/32	Letter, F. G. Smith to W. E. Levis.	60599	13773
1156	8/21/33	Owens-Illinois check and Treasurer's order, etc	60600	
1157	9/ –/32	Check stub, Hartford-Empire Co. to Owens-Illinois Glass Co	60604	13774
1158	10/ –/32	Owens - Illinois journal voucher entry	60605	13777
1159	7/ 1 to 9/30/32	Summary and invoices, Hartford-Empire Co. to Owens-Illinois Glass Co	60606	13778
1160	12/ –/30	Owens - Illinois journal voucher entry	60609	13781
1161	9/12/32	Letter, Mandeville to I. J. Collins.	60610	13782
1162	2/20/33	Letter, F. G. Smith to Mandeville.	60611	13783
1163	3/24/33	Letter, Mandeville to Griffis	60612	13784
1164	8/17/33	Letter, Eldred to I. J. Collins	60613	13784A
1165	8/15/33	Letter, F. C. Ball to Eldred	60614	13785
1166	8/ 5/33	Letter, Coppe Co. to Ball Bros	60615	13785
1167	10/30/35	Letter, Mandeville to I. J. Collins.	60616	13786
1168	1/ 6/37	Letter, Fisher to I. J. Collins	60618	13787
1169	5/18/38	Letter, Nolan to Fisher	60619	

Exhibit Number	Date	Description	Original	Print
1170	5/26/38	Letter, Fisher to Nolan	60620	
1171	2/16/39	Letter, F. C. Ball to I. J. Collins	60621	13788
1172	2/22/39	Letter, Laughlin to F. G. Smith	60622	13788
1173	2/24/39	Letter, F. G. Smith to Laughlin	60623	13789
1174	4/18/39	Excerpt from Minutes of Meeting of Anchor Hocking directors	60624	13790
1175	5/ 3/39	Letter, Laughlin to Stauffen	60626	13791
1176	6/ 2/39	Letter, Laughlin to W. J. Belknap	60628	13792
1177	8/29/39	Letter, Anchor Hocking Glass Corp. to Hartford-Empire Co.	60629	13793
1178	6/20/40	Letter, Laughlin to Hartford-Empire Co	60630	13794
1179	12/15/38	Excerpts from testimony by F. C. Ball before TNEC	60631	13794
1180	12/18/28	Letter, Hartley to Mandeville	60635	13796
1181	1/ 7/32	Letter, F. C. Ball to Hartford-Empire Co	60636	13797
1182	1/12/32	Letter, Brown to F. C. Ball	60637	13797
1183	10/19/32	Memo, unsigned	60638	13798
1184	1/14/33	Letter, Green & McCallister to F. C. Ball	60639	13798
1185	1/19/33	Telegram, F. G. Smith to F. C. Ball	60641	13800
1186	4/12/34	Letter, Pease to G. A. Ball	60642	
1187	4/14/34	Letter, G. A. Ball to Pease	60643	
1188	1/25/34	Letter, McCallister to F. C. Ball	60644	
1189	11/17/34	Letter, G. A. Ball to F. G. Smith	60646	
1190	11/19/34	Telegram, F. G. Smith to G. A. Ball	60647	
1191	11/20/34	Telegram, Ball Bros. to F. G. Smith	60648	
1192	11/21/34	Letter, F. G. Smith to G. A. Ball	60649	
1193	6/ 7/35	Letter, Eldred to G. A. Ball	60650	13801
1194	5/13/35	Letter, Brown to F. C. Ball	60651	13802
1195	5/15/35	Letter, F. C. Ball to Brown	60652	13802
1196	1/ 4/36	Letter, Pease to F. C. Ball	60653	
1197	9/ 5/34	Letter, Safford to Searey	60654	13803
1198	9/19/34	Letter, Searey to Safford	60656	13804A
1199	1/28/35	Letter, F. C. Ball to Safford	60657	13804B
1200	9/14/36	Letter, Church to Searey	60658	13805
1201	10/20/36	Letter, Searey to Safford	60659	13806A
1202	11/27/36	Telegram, Searey to Safford	60661	
1203	10/19/32	Telegram, Safford to F. C. Ball	60662	13806C
1204	10/19/32	Telegram, F. C. Ball to F. G. Smith	60663	13806D
1205	10/19/32	Telegram, Safford to F. C. Ball	60664	

Exhibit Number	Date	Description	Original	Print
1206	6/21/33	Contract between Liberty Glass Co. and Three Rivers Glass Co.	18145	
1207	5/ 6/38	Letter, F. G. Smith to G. A. Ball..	60665	13807
1208	5/21/38	Letter, G. A. Ball to F. G. Smith..	60667	13808
1209	7/ 1/38	Letter Agreement, Hartford-Empire Co. and Ball Bros. Co....	18151	9306
1210	7/16/38	Letter, G. A. Ball to Safford.....	60668	13808
1211	7/ 1/37	Letter, Ellerman to Petty.....	60669	13809
1212	7/ 2/37	Letter, Sutton to Ellerman.....	60670	
1213	7/15/37	Letter, Ellerman to Sutton.....	60671	13810
1214	7/21/37	Letter, Sutton to Ellerman.....	60672	13810
1215	8/31/37	Letter, Petty to Ellerman.....	60673	13811
1216	8/19/33	Letter, McCallister to F. E. Ball.	60674	13811
1217	9/14/35	Letter, F. C. Ball to McCallister..	60676	13813
1218	8/11/36	Letter, F. C. Ball to Brown.....	60678	
1219	12/16/37	Letter, F. C. Ball to McCallister.	60679	
1220	12/30/36	Letter, F. C. Ball to McCallister.	60680	13813
1221	5/ 5/37	Letter, Bracken to McCallister...	60681	
1222	5/ 7/37	Letter, Safford to Werbe.....	60683	
1223	6/25/35	Letter, F. C. Ball to Hunter.....	60684	13814
1224	6/25/35	Telegram, Hartford-Empire Co. to Ball Bros. Co.....	60685	
1225	6/25/35	Telegram, Ball Bros. Co. to Hartford-Empire Co.....	60686	
1226	6/30/37	Letter, F. G. Smith to G. A. Ball..	60687	
1227	7/28/38	Memo, Hatfield to Clark.....	60688	13815
1228	1/13/39	Letter, F. C. Ball to F. G. Smith.	60689	13816
1229	3/29/39	Letter, F. G. Smith to Bracken..	60690	
1230	3/29/39	Letter, F. G. Smith to Ball Bros. Co.....	60691	13816A
1231	4/10/39	Letter, Brown to McCallister....	60692	13816B
1232	5/ 9/39	Letter, Bracken to Safford.....	60695	13817
1233	5/26/39	Letter, F. G. Smith to F. C. Ball.	60696	
1234	6/26/39	Letter, Bracken to Brown.....	60697	13817
1235	1/30/25	Letter, Mandeville to Boshart....	60698	13818
1236	9/ 6/27	Letter, G. F. Collins to Mandeville.....	60701	
1237	10/24/27	Letter, Mandeville to Niver.....	60703	13816C
1238	9/19/27	Letter, G. F. Collins to Mandeville.....	60704	
1239	1/ 5/28	Letter, Mandeville to Griffis.....	60705	13820
1240	2/16/28	Letter, G. F. Collins to Mandeville.....	60706	
1241	3/17/28	Letter, Mandeville to Hemphill, Noyes & Co.....	60707	13821
1242	10/19/28	Letter, F. G. Smith to Mandeville.	60708	13822
1243	10/24/28	Letter, F. G. Smith to Mandeville.	60710	13823

Exhibit Number	Date	Description	Original	Print
1244	10/30/28	Letter, Mandeville to Tips	60711	13824
1245	11/26/28	Letter, Mandeville to Tips	60712	13825
1246	5/27/29	Letter, Tips to Thatcher Mfg. Co.	60713	13826
1247	7/24/29	Letter, Mandeville to Tips	60715	13828
1248	11/11/29	Letter, Mandeville to Hartley	60716	13829
1249	12/23/29	Letter, F. G. Smith to Mandeville	60718	13830
1250	12/30/29	Letter, F. G. Smith to Mandeville	60720	13831
1251	1/17/30	Letter, Mandeville to Ayers	60721	13832
1252	12/ 8/30	Letter, Mandeville to Haselton	60726	13835
1253	4/29/31	Letter, Mandeville to Squires	60727	13836
1254	1/19/32	Letter, Mandeville to Pennebaker	60729	13837
1255	5/16/32	Letter, Mandeville to F. G. Smith	60731	13839
1256	9/ 9/32	Letter, Mandeville to Griffis	60732	13840
1257	6/ 1/33	Telegram, G. F. Collins to Mandeville	60734	
1258	7/28/24	Letter, Hatch to Carter	50735	13842
1259	7/28/24	Letter, Hatch to Krey	60737	13843
1260	2/17/31	Memo by Hatch	60739	
1261	4/22/32	Letter, Hatch to Carter	60741	
1262	7/22/26	Letter, Hatch to Carter	60742	13844
1263	3/30/26	Letter, Hatch to Carter	60743	13845
1264	6/ 1/32	Invoice, Whittemore, Hulbert, Whittemore & Belknap to Hartford-Empire Co	60746	13848
1265	7/22/32	Telegram, Brown to Hatch	60747	13849
1266	8/ 4/32	Petty cash voucher, Hatch	60748	13850
1267	8/ 8/32	Memos by Champeau	60750	13852
	8/10/32	Western Union receipt and Champeau memo		
1268	6/19/34	Voucher, Hartford-Empire Co. to Clarke	60754	13856
	6/18/34	Bill, Clarke to Hartford-Empire Co		
1269	5/22/36	Voucher, Hartford-Empire Co. to Clarke	60756	13858
	5/21/36	Memo, Hatch to Champeau		
1270	1/20/33	Report by Hunter and Hatch	60759	13861
1271	7/10/35	Telegram, Butler to Hatch	60765	13866
1272	12/21/32	Letter, Safford to Saperston	60766	13867
1273	7/16/32	Telegram, Hatch to Clarke	60769	13870A
1274	7/17/32	Telegram, Clarke to Hatch	60770	13870B
1275	7/18/32	Telegram, Hatch to Clarke	60771	13870C
1276	8/ 5/32	Telegram, Hatch to Clarke	60772	13870D
1277	4/19/26	Letter, Hatch to Carter	60773	13871
1278	10/10/33	Certified copy of papers from application for Peller patent 1,655,391	27841	

Exhibit Number	Date	Description	Original	Print
1279	2/26/34	Memo, Lightner to Martin	60775	13872
1280	3/17/34	Memo, Martin to Lightner	60777	13873
1281	12/ 5/34	Memo by Martin	60778	13874
1282	2/25/35	Letter Agreement, Hartford-Empire Co. and Owens-Illinois Glass Co	18153	9307
1283	9/ 9/35	Memo, Naylor to C. B. Belknap	60781	
1284	8/24/33	Contract — Second Supplemental Agreement amending General License Agreement and Supplemental Agreement between Owens-Illinois Glass Co. and Hazel-Atlas Glass Co., dated July 1, 1932 (Exs. 148 and 149)	18155	9308
1285	5/ 1/33	Contract between Owens-Illinois Glass Co. and Hazel-Atlas Glass Co. re O'Neill	18160	9309
1286	1/23/36	Memo, Naylor to McNerney	60784	13876
1287	8/23/38	Memo, Naylor to C. B. Belknap	60785	13877
1288	1/28/35	Letter, Pease to F. C. Ball	60788	13878
1289	8/16/34	Memo, Pease to Champeau with two attachments	60789	13879
1290	9/24/35	Letter, Pease to Underwood	60792	13880A
1291	11/22/35	Letter, Pease to Underwood	60793	13880B
1292	6/22/36	Memo, Pease to F. G. Smith	60794	13881
1293	3/18/36	Memo, Pease to F. G. Smith	60796	13883
1294	3/31/37	Letter, Pease to Scalise	60799	13885
1295	6/ 9/37	Memo, Pease to F. G. Smith	60800	13886
1296	10/11/37	Letter, Pease to G. F. Collins	60801	
1297	6/ 2/38	Letter, Pease to Warfield	60802	13887
1298	12/21/39	Letter, Underwood to Pease	60803	13888
1299	12/26/39	Letter, Pease to Underwood	60805	13890
1300	3/11/40	Letter, Ahrons to Pease	60806	13891
1301	4/15/40	Telegram, Pease to Ahrons	60807	13892
1302	4/24/40	Letter, Ahrons to Pease	60808	13893
1303	12/21/37	Letter, Pease to Petty	60809	13895
1304	8/12/38	Letter, Pease to Koons	60810	13895
1305	8/15/38	Letter, Koons to Pease	60811	13896A
1306	8/15/38	Memo, Ohrn to Pease	60812	13897
1307	8/17/38	Letter, Pease to Ohrn	60813	13898
1308	9/14/38	Letter, Gayner to Pease	60814	13898A
1309	9/16/38	Letter, Pease to Gayner	60815	13899
1310	2/20/39	Memo, Pease to Licensing Committee	60816	13900A
1311	3/30/39	Letter, Rau to Pease	60818	13900C
1312	5/ 9/39	Letter, Pease to Curtiss	60819	.....
1313	6/28/39	Letter, Campbell to Pease	60820	13900D

Exhibit Number	Date	Description	Original	Print
1314	7/ 5/30	Letter, Pease to Campbell	60821	13001
1315	8/26/30	Letter, G. A. Ball to Hartford-Empire Co.	60822	13002A
1316	9/ 5/30	Letter, Pease to G. A. Ball	60823	13003
1317	9/11/30	Letter, G. A. Ball to F. G. Smith	60824	13004A
1318	9/20/30	Letter, Pease to Noble	60825	13005
1319	11/ 3/30	Letter, Pease to Bartlett	60826	13006
1320	11/25/30	Letter, Pease to Bartlett	60827	13006
1321	11/ 3/30	Letter, Pease to Curtiss	60828	13007
1322	11/ 3/30	Letter, Pease to Curtiss	60829	13007
1323	11/ 4/30	Memo, Pease to Champeau	60831	13008
1324	11/ 2/30	Letter, Pease to Curtiss	60832	13009
1325	11/10/30	Letter, Curtiss to Pease	60833	13010A
1326	9/ 9/40	Letter, Mount to Pease	60834	13010B
1327	9/12/40	Letter, Pease to Mount	60835	13011
1328	10/26/39	Letter, Bartlett to Pease	60836	
1329	Undated	Stipulation, U. S. and Ball Brothers Co.	15343	
1331	6/ 5/36	Letter, Barnett to Wright	60839	
1332	8/ 5/36	Letter, Barnett to Wright	60842	
1333	9/ 4/36	Letter, Barnett to Wright	60845	
1334	9/ 9/36	Letter, Wright to Barnett	60847	
1335	11/10/36	Letter, Barnett to Wright	60848	
1336	11/18/36	Letter, Wright to Barnett	60849	
1337	4/ 7/32	Letter, Wellinghoff to J. T. & A. Hamilton Co.	60850	13011
1338	8/10/32	Letter, Wellinghoff to King	60851	13012
1339	10/29/31	Memo, Howard to Eldred	60852	13012
1340	2/ 8/30	Memo, Eldred to F. G. Smith	60857	13017
1341	12/13/30	Letter, Carter to Eldred	60859	
1342	12/15/30	Letter, Eldred to Carter	60860	
1343	8/10/31	Letter, G. F. Collins to Eldred	60861	
1344	6/ 1/31	Letter, Eldred to Tips	60862	13018
1345	7/23/32	Letter, F. G. Smith to Reed	60865	13020
1346	8/19/32	Letter, Eldred to Reed	60866	13021
1347	8/24/32	Letter, Reed to Eldred	60867	13022
1348	8/30/32	Letter, Eldred to Reed	60868	13022
1349	10/31/32	Letter, Eldred to Reed	60869	13023
1350	11/ 7/32	Letter, Reed to Eldred	60870	13024
1351	11/14/32	Letter, Eldred to Reed	60871	13024
1352	12/ 9/32	Letter, Reed to Eldred	60872	13025
1353	12/12/32	Letter, Eldred to Reed	60873	13026
1354	10/25/33	Memo, Eldred to F. G. Smith	60875	13027
1355	11/23/32	Letter, Eldred to Curtiss	60877	13028
1356	11/25/32	Letter, Curtiss to Eldred	60878	13029
1357	11/28/32	Letter, Eldred to Curtiss	60879	13031
1358	11/28/32	Letter, Curtiss to Hatch	60881	13032

Exhibit Number	Date	Description	Original	Print
1359	12/31/32	Letter, Eldred to Curtiss	60882	.....
1360	3/27/33	Letter, Davis to Eldred	60883	13933
1361	3/27/33	Letter, Davis to Eldred	60884	13934
1362	3/31/33	Letter, Eldred to Davis	60885	13934
1363	3/31/33	Letter, Eldred to Davis	60886	13935
1364	9/15/37	Memo, Eldred to F. G. Smith	60888	13937
1365	9/12/34	Contract of sale and release Brockway Glass Co. and Hartford-Empire Co.	18162	9311
1366	12/23/37	Letter, Curtiss to Eldred	60895	13942
1367	2/10/38	Memo, St. John to F. G. Smith	60896	13944A
1368	5/18/39	Letter, Eldred to Bacon	60897	13945
1369	9/16/38	Memo, Eldred to Pease	60898	13946
1370	2/18/37	Memo, Bowes to W. E. Levis	60899	
1371	Undated	G.C.A. Tabulation, "Research and Trade Promotion"	60900	13946A
1371A	Undated	G.C.A. Tabulation, "Research and Trade Promotion"	60901	13947A
1372	Undated	G.C.A. Tabulation, "Accounts Receivable—Dues"	60902	13948A
1372A	Undated	G.C.A. Tabulation, "Accounts Receivable—Dues"	60903	13949
1373	6/ 1/33	Letter, Ackerman to Eldred	60904	13949
1374	6/ 2/33	Letter, Eldred to Ackerman	60905	13950
1375	6/ 2/33	Letter, Hatch to Ackerman	60906	13951
1376	1/23/34	Letter, Underwood to Ackerman	60908	13953
1377	2/ 5/34	Letter, Ackerman to Underwood	60909	13954
1378	3/25/36	Letter, Rau to Ackerman	60910	13955
1379	3/28/36	Letter, Ackerman to Rau	60911	13957
1380	11/ 5/28	Letter, Mandeville to Hartley	60912	13958A
1381	5/25/31	Letter, H. K. Smith to Glass Container Association	60913	13959
1382	11/ 9/31	Letter, Hobson to I. J. Collins	60915	13961
1383	4/13/34	Letter, J. S. Algeo to Ackerman	60922	13968
1384	4/28/34	Letter, Ackerman to J. S. Algeo	60923	13969
1385	8/31/36	Letter, Ackerman to Morrison	60924	
1386	1/20/38	Memo, Megowen to W. E. Levis	60925	13970
1387	1/18/38	Letter, Ackerman to W. E. Levis	60928	
1388	2/14/39	Letter, F. L. Collins to Hall	60929	13973
1389	3/ 3/39	Letter, McConnico to Hall	60930	13974
1389A	3/ 3/39	Letter, McConnico to Hall	53977	
1389B	.....	Owens-Illinois price lists referred to in Ex. 1389A	54160	
1390	.....	Compilations of figures with reference to glass industry	54531	12036
1391	.....	"	.....	12037
1392	.....	"	.....	12038

Exhibit Number	Date	Description	Original	Print
1393	.....	Compilations of figures with reference to glass industry.....	.....	12038
1394	.....	"	.....	12040
1395	.....	"	.....	12041
1396	.....	"	.....	12042
1397	.....	"	.....	12043
1397A	.....	"	.....	12044
1398	.....	"	.....	12045
1399	.....	"	.....	12046
1400	.....	"	.....	12047
1401	.....	"	.....	12048
1402	.....	"	.....	12049
1403	.....	"	.....	12050
1404	.....	"	.....	12051
1405	.....	"	.....	12052
1406	.....	"	.....	12053
1407	.....	"	.....	12054
1408	.....	"	.....	12055
1409	.....	"	.....	12056
1410	.....	"	.....	12057
1411	.....	"	.....	12058
1412	.....	"	.....	12059
1413	.....	"	.....	12060
1414	.....	"	.....	12061
1415	.....	"	.....	12062
1416	.....	"	.....	12063
1417	.....	"	.....	12064
1418	.....	"	.....	12065
1419	.....	"	.....	12066
1420	.....	"	.....	12067
1421	.....	"	.....	12068
1422	.....	"	.....	12069
1423	.....	"	.....	12070
1424	.....	"	.....	12071
1425	.....	"	.....	12072
1426	.....	"	.....	12073
1427	.....	"	.....	12074
1428	.....	"	.....	12075
1429	.....	"	.....	12076
1430	.....	"	.....	12077
1431	.....	"	.....	12078
1432	.....	"	.....	12079
1433	.....	"	.....	12080
1434	.....	"	.....	12081
1435	.....	"	.....	12082
1436	.....	"	.....	12083
1437	.....	"	.....	12084
1438	.....	"	.....	12085

Exhibit Number	Date	Description	Original	Filed
1439	.....	Compilations of figures with reference to glass industry.....	.....	12066
1440	.....	"	.....	12067
1441	.....	"	.....	12068
1442	.....	"	.....	12069
1443	.....	"	.....	12080
1444	.....	"	.....	12081
1445	.....	"	.....	12082
1446	.....	"	.....	12083
1447	.....	"	.....	12084
1448	.....	"	.....	12085
1449	.....	"	.....	12086
1450	.....	"	.....	12087
1451	.....	"	.....	12088
1452	.....	"	.....	12089
1453	.....	"	.....	12100
1454	.....	"	.....	12101
1455	.....	"	.....	12102
1456	.....	"	.....	12103
1457	.....	"	.....	12104
1458	.....	"	.....	12105
1459	.....	"	.....	12106
1460	.....	"	.....	12107
1461	.....	"	.....	12108
1462	.....	"	.....	12109
1463	.....	"	.....	12110
1464	.....	"	.....	12111
1465	.....	"	.....	12112
1466	.....	"	.....	12113
1467	.....	"	.....	12114
1468	.....	"	.....	12115
1469	.....	"	.....	12116
1470	.....	"	.....	12117
1471	.....	"	.....	12118
1472	.....	"	.....	12119
1473	.....	"	.....	12120
1474	.....	"	.....	12121
1475	.....	"	.....	12122
1476	.....	"	.....	12123
1477	.....	"	.....	12124
1478	.....	"	.....	12125
1479	.....	"	.....	12126
1480	.....	"	.....	12127
1481	.....	"	.....	12128
1482	.....	"	.....	12129
1483	.....	"	.....	12130
1484	.....	"	.....	12131
1485	.....	"	.....	12133

Exhibit Number	Date	Description	Original	Duplicate
1456	Undated	Stipulation between U. S. and Glass Container Association re to Exs. 1260-1455	13705	9705
1457	6/ 6/20	Letter, Mangle to Eldred	60951	13975
1458	3/15/24	Memo, unsigned, "Examination Survey" etc.	60969	13977
1459	12/16/22	Contract—Settlement Agreement between Hartford-Empire Co. and McLaughlin Glass Co.	13165	9613
1460	1/ 7/26	Letter, Schwenniger to Eldred	60939	13979
1461	1/14/26	Letter, Schwenniger to Eldred	60938	13983
1462	1/ 7/26	Letter, Pollock to Roper	60940	13984
1463	3/26/26	Memo, Pollock to Thompson	60941	13984
1464	5/26/26	Memo, Pollock to Schwenniger	60942	13985
1465	12/ 7/20	Report to Owens Bottle Co. directors	60943	13985
1466	5/21/24	Excerpt from Report to Owens Bottle Co. directors	60945	13988
1467	7/18/33	Excerpt from Minutes of meeting of Owens-Illinois Glass Co. directors	60946	13989
1468	7/23/32	Letter, Harding to McCallister	60948	13991
1469	9/17/27	Letter, Rummel to Hartley	60949	13992
1500	9/14/28	Letter, unsigned to Rummel	60955	13997
1501	5/ 3/20	Letter, F. G. Smith to Hartley	60958	13998A
1502	4/10/20	Memo, unsigned, "Gold Dust Corporation"	60960	
1503	5/ 7/20	Memo by Hartley	60961	
1504	5/ 6/20	Memo by Hartley	60962	13999
1505	7/18/20	Letter, Hartley to Mandeville	60964	14000
1506	4/14/20	Letter, Hartley to F. G. Smith	60966	14001
1507	4/17/20	Letter, F. G. Smith to Hartley	60967	14002
1508	3/12/23	Letter, Williams to Blair	60968	14003
1509	5/25/18	Letter, Dorsey to Falck	60971	14004
1510	5/25/18	Letter, Dorsey to Morrison	60973	14005
1511	10/24/19	Letter, Honiss to Dorsey	60975	
1512	11/22/19	Letter, Dorsey to Falck	60976	14010
1513	12/11/19	Letter, Dorsey to Falck	60979	14013
1514	8/ 9/21	Letter, Dorsey to F. G. Smith	60984	
1515	8/12/21	Letter, F. G. Smith to Dorsey	60988	
1516	10/ 8/21	Letter, Dorsey to Cox	60989	
1517	11/23/21	Letter, Dorsey to Cox	60991	
1518	11/28/21	Letter, Dorsey to F. G. Smith	60992	
1518A	11/26/21	Letter, Cox to Dorsey	60993	
1519	12/ 8/21	Letter, Dorsey to Cox	60994	
1519A	12/ 6/21	Letter, F. G. Smith to Dorsey	60995	
1520	12/14/21	Letter, Cox to Dorsey	60996	14015A

Exhibit Number	Date	Description	Original	Print
1521	12/19/21	Telegram, F. G. Smith to Dorsey..	60997	14018B
1522	12/27/21	Letter, Dorsey to F. G. Smith....	60998	14019
1523	1/ 2/23	Letter, Dorsey to F. G. Smith....	61000	14020
1524	1/ 3/23	Letter, Dorsey to F. G. Smith....	61002	14022
1525	2/17/23	Letter, F. G. Smith to Dorsey....	61005	
1526	2/19/23	Letter, Dorsey to F. G. Smith....	61007	14024
1527	5/29/24	Letter, Dorsey to C. B. Belknap..	61009	14026A
1528	6/28/24	Letter, Dorsey to F. G. Smith.....	61013	14027
1529	5/20/31	Memo, unsigned.....	61018	14030
1530	8/19/37	Letter, Dorsey to A. Houghton...	61021	14033
1531	8/10/37	Memo, Parham to F. G. Smith...	61022	14034
1532	6/30/36	Memo by Macbeth.....	61028	
1533	6/30/36	Letter, Wright to Macbeth-Evans Glass Co.....	61029	
1534	7/10/36	Letter, Dorsey to A. Houghton...	61030	
1535	10/28/36	Letter, Dorsey to Curtiss.....	61031	
1536	11/30/36	Letter Agreement, Owens-Illinois Glass Co., Libbey Glass Co. and Corning Glass Works.....	18169	9314
1537	6/28/37	Letter, Dorsey to A. Houghton...	61033	14039
1538	10/19/38	Letter, Dorsey to Curtiss.....	61034	14040A
1539	11/26/38	Letter, Parham to Curtiss.....	61038	14041
1540	12/ 1/38	Letter, Curtiss to Parham.....	61040	14042A
1541	12/ 1/38	Letter waiver, Corning Glass Works to Hartford-Empire Co..	18170	9316A
1542	8/16/40	Letter, Parham to A. Houghton..	61041	14043
1543	8/26/30	Memo by Green.....	61043	14043
1545	1/13/32	Memo by Curtiss.....	61045	14046
1546	1/20/32	Memo by Curtiss.....	61048	14048
1547	2/18/32	Letter, Macbeth to Curtiss.....	61050	14050
1548	10/14/32	Memo, Green to Curtiss.....	61052	14052
1549	1/24/33	Memo, Curtiss to Peden.....	61053	14052
1550	2/ 9/33	Memo, Curtiss to Peden.....	61054	14053
1551	4/26/39	Letter, Curtiss to F. G. Smith....	61056	14054A
1552	Undated	Stipulation between U. S. and Anchor Hocking Glass Corp. re genuineness of documents.....	15268	
1553	9/ -/40	Stipulation between U. S. and Ball Bros. Co. re genuineness of documents.....	15276	
1554	10/13/41	Stipulation between U. S. and Corning Glass Works re genuineness of documents.....	15282	
1555	Undated	Stipulation between U. S. and Hartford-Empire Co. re genuineness of documents.....	15290	

Exhibit Number	Date	Description	Original	Print
1556	Undated	Stipulation between U. S. and Hartford-Empire Co. re papers appearing in files of Hartford-Empire Co	15319	
1557	Undated	Stipulation between U. S. and Hazel-Atlas Glass Co. re genuineness and copies in files	15327	
1558	Undated	Stipulation between U. S. and Lynch Corp. re genuineness of documents	15335	
1559	Undated	Stipulation between U. S. and Lynch Corp. re papers appearing in files of Lynch Corp	15344	
1560	4/24/41	Stipulation between U. S. and Liberty Glass Co. re genuineness of documents	15347	
1561	10/22/41	Stipulation between U. S. and W. E. Levis re genuineness of documents	15350	
1562	10/22/41	Stipulation between U. S. and W. E. Levis re papers appearing in files of W. E. Levis	15353	
1563	10/22/41	Stipulation between U. S. and Owens - Illinois Glass Co. re genuineness of documents	15356	
1564	10/22/41	Stipulation between U. S. and Owens - Illinois Glass Co. re papers appearing in files of Owens-Illinois Glass Co	15370	
1565	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re genuineness of documents	15374	
1566	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re papers appearing in files of Thatcher Mfg. Co	15383	
1567	Undated	Stipulation between U. S. and all defendants re use of stipulations	15386	
1568	Undated	Stipulation between U. S. and all defendants re classification of glass industry	15389	8037
1569	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re patents owned by Anchor Hocking Co	15393	

Exhibit Number	Date	Description	Original	Print
1570	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re balance sheets and income statements of Anchor Cap Corp....	15398	
1571	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re balance sheets and income statements of Hocking Glass Co.....	15405	
1572	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re balance sheets and income statements of General Glass Corp.....	15408	8040
1573	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re balance sheets and income statements of Lancaster Glass Co.....	15412	
1574	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re balance sheets and income statements of Standard Glass Mfg. Co.....	15415	
1575	Undated	Stipulation between U. S. and Anchor Hocking Glass Co. re various data.....	15418	
1576	10/ -/40	Stipulation between U. S. and Ball Bros. Co. re various data..	15497	8043
1577	Undated	Stipulation between U. S. and Corning Glass Works re income statements.....	15525	8069
1578	Undated	Stipulation between U. S. and Corning Glass Works re net income of Corning Glass Works and subsidiaries.....	15526	8070
1579	Undated	Stipulation between U. S. and Corning Glass Works re balance sheets.....	15527	8070A
1580	Undated	Stipulation between U. S. and Corning Glass Works re balance sheets of Empire Machine Co..	15529	8071
1581	Undated	Stipulation between U. S. and Corning Glass Works re price history of Pyrex ovenware dishes.....	15532	8072

Exhibit Number	Date	Description	Original	Print
1582	Undated	Stipulation between U. S. and Corning Glass Works re stockholders of Corning Glass Works	15547	8083
1583	Undated	Stipulation between U. S. and Hartford-Empire Co. re stockholders of Hartford-Empire Co.	15569	8095
1584	Undated	Stipulation between U. S. and Hartford-Empire Co. re royalties paid by Hartford licensees....	15686	8107
1585	Undated	Stipulation between U. S. and Hartford-Empire Co. re rates of royalty on Hartford machines.....	15694	8133
1586	Undated	Stipulation between U. S. and Hartford-Empire Co. re interstate aspects of Hartford-Empire business.....	15693	8139
1587	Undated	Stipulation between U. S. and Liberty Glass Co. re balance sheets and profit and loss statements.....	15695	8140
1588	Undated	Stipulation between U. S. and Liberty Glass Co. re various data.....	15725	
1589	Undated	Stipulation between U. S. and Liberty Glass Co. re genuineness of documents.....	15799	
1590	Undated	Stipulation between U. S. and Lynch Corp. re balance sheets and income statements.....	15835	8143
1591	Undated	Stipulation between U. S. and Lynch Corp. re ownership of stocks by Lynch defendants...	15839	8146
1592	Undated	Stipulation between U. S. and Lynch Corp. re Lynch forming machine prices.....	15840	8147
1593	Undated	Stipulation between U. S. and Lynch Corp. re ownership of stock in Lynch Corp.....	15846	8153
1594	6/16/41	Stipulation between U. S. and Owens - Illinois Glass Co. re fruit jar price lists, patent litigation, etc.....	15847	8153
1595	9/10/40	Stipulation between U. S. and Owens - Illinois Glass Co. re various data.....	15904	8155

Exhibit Number	Date	Description	Original	Print
1596	9/10/40	Stipulation between U. S. and Owens - Illinois Glass Co. re balance sheets and income statements	15928	8194
1597	?	Stipulation between U. S. and Owens - Illinois Glass Co. re patents and interferences	15952	8219
1598	9/10/40	Stipulation between U. S. and Owens-Illinois Glass Co. re price lists	15990	8243
1599	9/10/40	Stipulation between U. S. and Owens - Illinois Glass Co. re price lists	16168	8403
1600	9/10/40	Stipulation between U. S. and Owens - Illinois Glass Co. re statistical reports from GCA to Owens Co	16192	8420
1601	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re milk bottle price lists	16198	8423
1602	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re milk bottle sales	16219	8433
1603	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re balance sheets and profit and loss statements	16222	8435
1604	Undated	Stipulation between U. S. and Thatcher Mfg. Co. re various data	16273	8494
1605	12/ 7/35	License and Lease No. HSF-324 from Hartford - Empire Co. to Hocking Glass Co.	18171	9317
1606	9/16/32) 7/16/40)	Consolidated Feeder Agreement, Hartford-Empire Co. and General Glass Corp.	18207	9326A
1507	1/25/37	License and Lease No. HSF-347 from Hartford-Empire Co. to Salem Glass Works	18243	9334
1608	12/23/20) 11/30/34)	License Agreement between Empire Machine Co. and American Thermos Bottle Co. (renewed by Hartford-Empire Co. and American Thermos Bottle Co.)	18274	9336
1609	4/ 9/32	Letter, Eldred to Payson	61057	14055

Exhibit Number	Date	Description	Original	Print
1610	1/24/39	Letter, Hartford-Empire Co. to American Thermos Bottle Co..	61064	14059
1611	8/15/40	License and Lease No. HSF-436, Hartford-Empire Co. to Armstrong Cork Co.....	18285	9344
1612	1/11/26	License and Lease No. HSF-82, Hartford-Empire Co. to Buck Glass Co.....	18312	9344
1613	10/30/24	License and Lease No. HSF-23, Hartford-Empire Co. to Carr-Lowrey Glass Co.....	18361	9346
1614	8/21/23	License and Lease No. HSF-10, Hartford-Empire Co. to Chattanooga Bottle & Glass Mfg. Co.....	18401	9348
1615	6/10/24	Contract between Hartford-Empire Co. and Corning Glass Works—sale of Paddle Needle Feeders and Single Feeders....	18443	9349
1616	1/26/38	Contract — Lease Agreement between Hartford-Empire Co. and Corning Glass Works.....	18445	9350
1617	3/27/33	Contract — General Agreement between Hartford-Empire Co. and Diamond Glass Co.....	18452	9355
1618	4/30/34	Contracts — Settlement Agreement, General Agreement, Bill of Sale and Forming Machine Agreement between Hartford-Empire Co. and Fairmount Glass Works.....	18494	9358
1619	8/16/40	License and Lease No. HSF-437 from Hartford-Empire Co. to Federal Glass Co.....	18559	9360
1620	8/ 2/35	License and Lease No. MF-26 from Hartford-Empire Co. to Florida Glass Mfg. Co.....	18587	9360
1621	6/ 4/25	License and Lease No. HSF-56 from Hartford-Empire Co. to Upland Flint Bottle Co.....	18620	9363
1622	12/31/35	License and Lease No. HSF-318 from Hartford-Empire Co. to Gayner Glass Works.....	18658	9363
1623	7/27/29	License and Lease No. HSF-180 from Hartford-Empire Co. to Long Beach Glass Co.....	18688	9367

Exhibit Number	Date	Description	Original	Print
1624	10/ 8/36	License and Lease No. HSF-339 from Hartford-Empire Co. to Glenshaw Glass Co	18726	9368
1625	4/16/23	License and Lease No. HSF-4 from Hartford-Empire Co. to J. T. & A. Hamilton Co	18754	9386
1626	10/ 6/27	License and Lease No. HSF-151 from Hartford-Empire Co. to Indiana Glass Co	18799	9404
1627	11/ 2/39	License and Lease No. HSF-411 from Hartford-Empire Co. to Laurens Glass Works	18839	9404
1628	4/15/25	License and Lease No. HSF-42 from Hartford-Empire Co. to Maryland Glass Corp	18867	9404
1629	7/18/28	License and Lease No. HSF-162 from Hartford-Empire Co. to McKee Glass Co	18921	9405
1630	8/ 1/33	General Agreement between Hartford - Empire Co. and Northwestern Glass Co	18967	9405
1631	2/25/38	License and Lease No. HSF-386 from Hartford-Empire Co. to Libbey Glass Co	19018	9408
1632	5/25/26	License and Lease No. MF-9 from Hartford-Empire Co. to Liberty Glass Co	19047	9426
1633	9/ 6/29	License and Lease No. HSF-188 from Hartford-Empire Co. to Olean Glass Co	19080	9426
1634	7/ 2/23) 7/14/37)	License and Lease No. Hwd. 45 from Hartford-Empire Co. to Pierce Glass Co. and Special Renewal Agreement	19116	9426
1635	7/ 7/33	General Agreement between Hartford Empire Co. and Sterling Glass Co	19155	9446
1636	2/18/36	Contracts between Hartford-Empire Co. and Tygart Valley Glass Co.—Settlement Agreement, General Agreement, Letter re Forming Machines and Lehrs, and Bill of Sale	19197	9450
1637	12/13/38	License and Lease No. HSF-393 from Hartford-Empire Co. to T. C. Wheaton Co	19252	9452

Exhibit Number	Date	Description	Original	Print
1638	Undated	Form of license and lease used by Hartford-Fairmont Co. prior to Oct. 6, 1922	19285	9482
		Excerpts from Minutes of Meetings of Boards of Directors of defendant corporations and predecessors thereof		
1639	7/28/16	Hartford-Fairmont Co.	61060	
1640	4/ 2/24	Hartford-Empire Co.	61057	14060
1641	11/ 9/32	Hartford-Empire Co.	61059	14062
1642	5/ 9/33	Hartford-Empire Co.	61073	14065
1643	11/24/33	Hartford-Empire Co.	61074	14066
1644	9/18/35	Hartford-Empire Co.	61075	14067
1645	12/ 1/16	Empire Machine Co.	61076	
1646	2/13/23	Corning Glass Works	61079	
1647	10/28/29	Corning Glass Works	61080	
1648	2/11/30	Corning Glass Works	61082	14067
1649	4/ 9/24	Owens-Illinois Glass Co.	61083	
1650	7/19/32	Owens-Illinois Glass Co.	61084	14068
1651	3/29/33	Owens-Illinois Glass Co.	61096	14069
1651A	3/27/33	Letter, W. J. Belknap to W. E. Levis	61088	14071
1651B	3/27/33	Letter, W. J. Belknap to W. E. Levis	61090	14073
		Excerpts from Minutes of Meetings of Boards of Directors of defendant corporations and predecessors thereof		
1652	5/ 9/33	Owens-Illinois Glass Co.	61091	14074
1653	10/11/33	Owens-Illinois Glass Co.	61092	14075
1654	9/27/35	Owens-Illinois Glass Co.	61094	14076
1655	6/28/32	Hazel-Atlas Glass Co.	61096	14078
1656	7/26/32	Hazel-Atlas Glass Co.	61097	14079
1657	10/11/35	Hazel-Atlas Glass Co.	61098	14080
1658	6/26/33	Ball Bros. Co.	61100	14082
1659	9/ 9/23	Lynch Corp.	61102	14084
1660	1/23/30	Lynch Corp.	61109	
1661	12/ 7/32	Thatcher Mfg. Co.	61110	14091
1662	2/18/31	Thatcher Mfg. Co.	61113	14094
1663	2/24/31	Hocking Glass Co.	61115	
1664	4/25/31	Hocking Glass Co.	61117	
1665	11/ 6/37	Hocking Glass Co.	61120	
1666	4/11/33	General Glass Corp. (stockholders)	61125	14095
1667	4/11/33	General Glass Corp. (directors)	61127	14097
1668	10/20/37	Anchor Cap Corp.	61128	
1669	7/20/21	Contract between Corning Glass Works and McKee Glass Co.	19337	9469
1670	6/17/30	Contract between Corning Glass Works and McKee Glass Co.	19365	9487

Exhibit Number	Date	Description	Original	Print
1671	8/ 3/31	Contract between Corning Glass Works and McKee Glass Co...	19374	9493
1672	12/18/31	Contract between Corning Glass Works and McKee Glass Co...	19380	9495
1673	5/29/33	Contract between Corning Glass Works and McKee Glass Co...	19386	9496
1674	6/10/24	Stipulation for consent decree in Owens Bottle Co. v. J. T. & A. Hamilton Co. et al.....	61141	14098
1675	6/26/24	Letter, Brown to Carter.....	61143	14100
1676	1/16/25	Letter, Brown to Dorsey.....	61145	14101
1677	9/29/27	Letter, Hartley to Turner Glass Co.....	61146	14101
1678	6/ 2/30	Memo by Hartley.....	61148	14103
1679	6/ 5/30	Letter, F. G. Smith to Hartley...	61159	14111
1680	4/26/28	Letter, H. K. Smith to Thompson.	61165	
1681	Undated	Schedule of stockholders of Corning and Empire individual defendants in other companies...	61167	14116
1682	11/ 1/40	List of stockholders of Empire Machine Co.....	61168	14117
1683	Undated	Statement of net income of Corning Glass Works and affiliated companies.....	61169	14118
1684	Undated	Statement of profit and loss of Empire Machine Co.....	61170	14119
1685	10/25/39	Lehr agreement between Owens-Illinois Glass Co. et al. and Hartford-Empire Co.....	19396	9497
1686	8/29/19	Contract between J. W. Hamilton et al. and Thatcher Mfg. Co...	19406	9499
1687	6/26/33	Contract between Hartford-Empire Co., Hocking Glass Co., Thatcher Mfg. Co. and General Glass Corp.....	19410	9501
1688	3/17/36	Contract between Owens-Illinois Glass Co. and W. T. Rawleigh Co.....	19415	9504
1689	10/18/30	Settlement Agreement between Hartford-Empire Co. and Illinois Pacific Glass Corp. et al..	19416	9505
1690	7/12/37	Proposal by Liberty Glass Co. to Mrs. Harrell re Knape-Coleman Glass Co.....	61171	14119
1691	9/20/37	Receipt of Purchase Price by Knape-Coleman Glass Co.....	61177	14125
1692	1921–1923	Diaries of H. K. Smith.....	56245	

Exhibit Number	Date	Description	Original	Print
1692A	1923–1925	Diaries of H. K. Smith	56804	
1692B	1926–1928	Diaries of H. K. Smith	56993	
1692C	1929	Diary of H. K. Smith	57197	
1692D	1930	Diary of H. K. Smith	57312	
1692E	1931	Diary of H. K. Smith	57464	
1693	2/25/21	Excerpt from diary of H. K. Smith	61180	14127
1694	8/25/21	Excerpt from diary of H. K. Smith	61181	14128
1695	12/14/22	Excerpt from diary of H. K. Smith	61182	14129
1696	7/24/24	Excerpt from diary of H. K. Smith	61183	14129
1697	4/15/27	Excerpt from diary of H. K. Smith	61184	
1698	4/29/25	Excerpt from diary of H. K. Smith	61185	14129
1699	5/27/25	Excerpt from diary of H. K. Smith	61186	14130
1700	9/28/27	Excerpt from diary of H. K. Smith	61187	
1701	10/24/28	Excerpt from diary of H. K. Smith	61188	
1702	4/30/29	Excerpt from diary of H. K. Smith	61189	
1703	8/ 3/29	Excerpt from diary of H. K. Smith	61190	14131
1704	10/ 7/29	Excerpt from diary of H. K. Smith	61191	
1705	10/ 8/29	Excerpt from diary of H. K. Smith	61192	14131
1706	10/25/29	Excerpt from diary of H. K. Smith	61193	
1707	1/21/30	Excerpt from diary of H. K. Smith	61194	14132
1708	2/ 4/30) 2/17/30)	Excerpts from diary of H.K. Smith	61195	
1709	11/30/31	Excerpt from diary of H. K. Smith	61196	14133
1710	7/23/31	Memo, Safford to H. K. Smith...	61197	14133
1711	11/28/28	Memo by H. K. Smith	61202	
1712	8/26/29	Excerpt from diary of H. K. Smith.	61205	14134
1713	Undated	List of directors of Glass Container Association	61206	14135
1714	Undated	List of members of statistical committee of Glass Container Association	61209	14137
1715	Undated	List of members of executive committee of Glass Container Association	61211	14138
1716	7/22/19	Certificate of Incorporation and By-laws of Glass Container Association	61212	14138
1717	6/ 1/35	Letter, Kimball to Hall	61226	14153
1718	8/23/35	Letter, Ackerman to Kimball	61227	
1719	9/30/35	Letter, Kimball to Hall	61228	14154
1720	10/ 7/35	Letter, Hall to Kimball	61229	14155
1721	12/20/35	Minutes of meeting of Glass Container Association, West Coast Group	61230	14155
1722	1/21/37	Minutes of meeting of Glass Container Association, West Coast Group	61232	14156

Exhibit Number	Date	Description	Original	Print
1723	6/17–18/37	Minutes of meeting of Glass Container Association, West Coast Group	61234	14157
1724	8/26/37	Letter, Kimball to Hall	61235	14158
1725	8/10/37	Letter, Eastman to Kimball	61237	
1726	12/27/37	Letter, Hall to Kimball	61238	14159
1727	8/16/38	Letter, Kimball to Marsh	61239	14160
1728	8/11/38	Letter, Marsh to Kimball	61240	14160A
1729	Undated	Map of Los Angeles	16241	14160B
1730	Undated	Map of Los Angeles	61242	14160C
1731	Undated	List of price lists of Owens-Illinois Pacific Coast Co.	61243	14161
1731A	9/26/41	List of price lists of Owens-Illinois Pacific Coast Co.	61259	14174
1731B	9/25/41	List of price lists of Owens-Illinois Pacific Coast Co.	61270	14185
1731C	9/22/41	List of price lists of Owens-Illinois Pacific Coast Co.	61285	14200
1732	12/ 8/25	Memo by Brown	61288	14203
1733	10/ 9/25	Letter, Dorsey to Brown	61295	14207
1734	5/12/26	Memo, Brown to F. G. Smith	61300	14210
1735	3/17/26	Letter, Brown to Black	61302	14211
1736	1/ 8/25	Letter, F. G. Smith to Baker	61304	14212
1737	4/20/26	Letter, H. K. Smith to Lehmann & Lehmann	61306	14213
1738	8/15/28	Letter, Brown to Milans	61308	14214
1739	3/18/32	Memo by Brown	61310	14215
1740	7/ 9/32	Letter, Brown to Falck	61313	14218
1741	7/26/33	Memo, Brown to F. G. Smith	61317	14221
1742	5/24/34	Letter, Philbin to Brown	63119	14222
1743	1/26/33	Draft of proposed amendment to General License Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co. (Ex. 145)	19422	9509A
1744	2/ 4/33	Draft of proposed amendment to General License Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co. (Ex. 145)	19425	9509D
1745	2/ 6/33	Letter, Hornbrook to Brown	61320	14223
1746	2/14/33	Letter, Brown to Hornbrook	61321	14224
1747	9/ 9/24	Letter, Brown to Milans	61326	14228
1748	9/29/24	Letter, Brown to Carter	61329	14231
1749	5/20/25	Letter, H. K. Smith to Williams	61330	14231
1750	6/16/33	Letter, F. G. Smith and C. B. Belknap	61332	14233

Exhibit Number	Date	Description	Original	Print
1751	10/24/34	Memo, Gardner to Solon	61334	14234
1752	12/26/34	Letter, Brown to A. Houghton	61335	14235
1753	1/ 2/35	Letter, Curtiss to Brown	61339	14238
1754	10/15/37	Memo, unsigned	61342	14240
1755	11/ 8/37	Letter, Safford to Mandeville	61343	14241
1756	4/18/39	Letter, Bracken to Brown	71344	14242A
1757	7/29/31	Excerpt from diary of H. K. Smith	61345	14243
1758	3/23/32	Letter, Brown to Milans	61346	14243
1759	4/15/32	Letter, Brown to Milans	61348	14244
1760	2/26/30	Memo by Safford	61350	14245
1761	6/12/29	Memo by H. K. Smith	61353	14247
1762	10/13/31	Excerpt from diary of H. K. Smith	61354	
1763	11/29/32	Memo, Safford to F. G. Smith	61355	14248
1764	9/11/30	Letter, Safford to W. E. Levis	61361	14253
	9/22/30	Memo, McNerney to Carter	61363	14254
	9/22/30	Letter, McNerney to Safford	61362	14255
1765	10/11/32	Letter, F. G. Smith to Owens-Illinois Glass Co. (release)	19427	9509F
1766	10/11/32	Letter, F. G. Smith to Root Glass Co. (release)	19428	9509G
1767	12/29/32	Letter Agreement, Hartford-Empire Co. and General Glass Corp.	19429	9509H
1768	12/29/32	Letter, Safford to Hocking Glass Co.	61364	14256
1769	7/27/33	Letter Agreement, Hartford-Empire Co. and Hazel-Atlas Glass Co.	19430	9509J
1770	1/19/33	Memo by Safford	61366	14256C
1771	2/ 1/33	Memo, Safford to F. G. Smith	61368	14257
1772	4/13/33	Letter, Safford to Cole	61369	14258
1773	8/29/38	Memo by Safford	61378	14265
1774	8/18/38	TNEC supboena to Hartford-Empire Co. (See Ex. H-5329)	61380	
1775	Undated	Instructions with respect to subpoenas	61384	
1776	10/30/33	Letter, F. G. Smith to C. B. Belknap	61386	
1777	11/ 1/33	Letter, C. B. Belknap to F. G. Smith	61387	
1778	6/16/32	Memo by C. B. Belknap	61388	14266
1779	12/ 5/32	Memo, Safford to F. G. Smith	61391	14268
1780	12/15/31	Letter, Olive to Fulton, with exhibition re Monongah Glass Co.	61403	14281
1781	10/14/33	Letter, Werbe to Parham	61418	14291
1781A	10/ 9/33	Letter, Langer to Doll	61419	14291

Exhibit Number	Date	Description	Original	Print
1782	12/17/35	Letter, Cole to F. G. Smith	61421	14293
1783	10/18/38	Letter, Parham to A. Houghton	61423	14294
1784	6/ 1/29	Memo by Safford	61426	14294D
1785	6/ 5/34	Memo, unsigned, re Three Rivers Glass Co.	61427	14295
1786	8/26/32	Letter, Safford to Searcy	61432	14298
1787	9/16/32	Memo, Safford to F. G. Smith	61436	14301
1788	9/20/32	Letter, G. F. Collins to Safford	61439	
1789	11/19/32	Letter, Safford to Searcy	61440	
1790	12/17/32	Letter, Safford to Searcy	61442	14304
1791	4/ 5/33	Letter, Safford to Searcy	61446	14307
1792	4/13/33	Telegram, Safford to Searcy	61449	
1793	4/18/33	Telegram, Hartford-Empire Co. to Searcy	61450	
1794	5/20/33	Telegram, Hartford-Empire Co. to Coquat	61451	
1795	5/19/33	Telegram, Coquat to Hartford-Empire Co.	61452	
1796	5/24/33	Letter, F. G. Smith to Coquat	61453	
1797	6/ 5/33	Letter, G. F. Collins to F. G. Smith	61455	
1798	6/13/33	Memo by Safford	61458	14309
1799	6/15/33	Letter, Safford to Searcy	61461	14311
1800	6/16/33	Letter, Safford to Three Rivers Glass Co.	61464	14313
1801	6/21/33	Telegram, Coquat and Liberty Glass Co. to Hartford-Empire Co.	61467	
1802	6/26/33	Telegram, Searcy to Safford	61468	14316
1803	7/26/34	Letter, Safford to Searcy	61469	14317
1804	10/10/34	Letter, Safford to Searcy	61474	14320
1805	10/13/34	Letter, Safford to Searcy	61476	14321
1806	6/ 4/35	Letter, Safford to Searcy	61478	14323
1807	3/ 6/31	Memo by H. K. Smith	61480	14324
1808	11/29/35	Letter, F. G. Smith to Mandeville	61482	14326
1809	6/ –/35	Reference Manual, Hartford-Empire Production Report	61484	14328
1810	12/27/35	Letter, F. G. Smith to Mandeville	61502	14347
1811	1/ 6/36	Letter, F. G. Smith to Mandeville	61503	14347
1812	2/12/35	Memo by Safford	61505	14348
1812A	5/15/35	Memo, Hatch to Champeau	61506	14348
1813	4/24/35	Voucher re Gayner Glass Works	61507	14348A
1813A	4/23/35	Letter, Gayner to Pease	61508	14348B
1814	10/11/33	Letter Agreement between Hartford-Empire Co. and Knox Glass Bottle Co. et al	19432	9509L

Exhibit Number	Date	Description	Original	Print
1815	1/16/37	Letter Agreement between Hartford-Empire Co. and Knox Glass Bottle Co. et al	19434	9509N
1816	10/ 1/37	Letter, Safford to Underwood	61509	14342C
1817	11/ 7/33	Letter Agreement between Hartford-Empire Co. and Universal Glass Products Co.	19436	9509Q
1818	3/ 2/34	Letter, Safford to Davis	61510	14349
1819	10/ 2/34	Letter, Martin to Safford	61512	14350
1820	7/22/35	Memo, Butler to Safford	61513	14350
1821	3/ 9/39	Letter Agreement between Hartford-Empire Co. and Knox Glass Associates	19437	9509R
1822	3/ 9/39	Letter Agreement between Hartford-Empire Co. and Knox Glass Associates	19439	9509T
1823	12/29/37	Chart signed "Survey & Statistical Dept."	61516	14352A
1823A	11/ 5/41	Chart signed "Hartford-Empire Co. Ind. Eng. Dept."	61517	14352B
1824	Undated	Tabulation, "Proportions of cost and profit to selling price"	61518	14353
1824A	?	Chart, "Glass Container Production 1937", etc	61519	14354A
1824B	11/11/41	Chart, "Glass Container Production 1937", etc	61520	14354B
1842C	11/11/41	Chart, "Glass Container Production 1939", etc	61521	14354C
1825	9/19/38	Letter, Laughlin to Hartford-Empire Co	61522	
1826	9/30/38	Letter, Safford to Laughlin	61524	14355
1827	4/25/39	Memo, Laughlin to Sheridan	61525	14355
1828	5/ 1/39	Letter, Laughlin to Hartford-Empire Co	61527	
1829	6/ 6/34	License and Lease No. HSF-274, Hartford-Empire Co. to Akro-Agate Co	19442	9510
1830	11/ -/35	Excerpt from memo by Safford	61529	14356
1831	3/27/22	Letter, Dorsey to H. K. Smith	61530	14357
1732	4/21/22	Letter, F. G. Smith to Dorsey	61531	14358
1833	2/29/24	Memo, Carter to McNerney	61533	14359
1834	7/31/24	Letter, McNerney to F. G. Smith	61536	14362
1835	8/16/24	Letter, Williams to Boshart	61537	14363
1836	9/29/24	Letter, Rule to Milans	61539	14364
1837	8/27/25	Letter, Carter to C. B. Belknap	61540	14365
1838	6/ 9/26	Letter, Carter to F. G. Smith	61541	14366
1839	1/25/27	Letter, H. K. Smith to Williams	61544	14367

Exhibit Number	Date	Description	Original	Print
1840	7/ 7/27	Letter, F. G. Smith to Arkell....	61548	14370
1841	1/ 6/30	Letter, Mandeville to F. G. Smith.	61553	14370
1842	1/ 8/30	Letter, F. G. Smith to Mandeville.	61554	14371
1843	7/18/30	Letter, Mandeville to Griffis.....	61556	14372
1844	12/ 4/31	Letter, Mandeville to F. G. Smith.	61557	14373
1845	5/17/32	Letter, A. M. Algeo to McNash..	61559	14374
1846	7/21/32	Letter, McNash to Hazel-Atlas stockholders.....	61560	14375
1847	3/28/33	Letter, Eldred to Rieman.....	61561	14376
1848	7/20/33	Letter, F. G. Smith to McNash..	61563	14377
1849	5/22/34	Letter, Mandeville to I. J. Collins.....	61565	14378
1850	3/ 5/34	Contract between General Glass Corp. and Thatcher Mfg. Co...	19477	9510
1851	7/ 5/33	Letter, Pease to Crowell.....	61566	14379
1852	10/27/17	Excerpt from Minutes of meeting of Hartford-Fairmont Co. directors.....	61567	14380
		Excerpts from Reports by W. E. Levis to Owens-Illinois Directors		
1853	7/10/30	.....	61570	14381
1854	9/16/32	.....	61572	
1855	7/18/33	.....	61574	14382
1856	1/17/34	.....	61576	14383
1857	7/13/35	.....	61578	14385
1858	6/27/28	Contract amending license and release agreement, Hartford-Empire Co. to Corning Glass Works (Ex. 379).....	19478	9511
1859	7/ 9/29	Memo by H. K. Smith.....	61580	14385
1860	8/ 1/29	Memo by H. K. Smith.....	61582	14388
1861	7/24/30	Memo by H. K. Smith.....	61588	14394
1862	Undated	Stipulation between U. S. and Anchor Hocking Glass Corp. re balance sheets, etc.....	16287	
1863	5/31/33	Letter, Cole to F. G. Smith.....	61590	14397
1864	10/ 9/41	Portion of deposition of F. C. Hall	64722	
1865	8/ 5/16	Option, Hitchcock Experiment Co. to Hartford-Fairmont Co.....	19481	9512A
1866	2/27/18	Assignment, H. K. Hitchcock et al to Hartford-Fairmont Co.....	19482	9512B
1867	5/23/19	Contract between H. K. Hitchcock et al. and Hartford-Fairmont Co.....	19488	9513
1868	12/28/20	Letter, Honiss to Taylor.....	61605	14403
1869	1/25/24	Excerpt from Peiler note book...	61607	14404

Exhibit Number	Date	Description	Original	Print
1870	1/26/24	Report by Howard	61610	14406
1871	11/ 5/21	Letter, Peiler to Bartlett	61614	14407
1872	5/15/22	Minutes of meeting of Executive Committee of Hartford-Fairmont Co	61616	14408
1873	6/ 2/24	Letter, Brown to Carter, with memo	61619	14410
1874	6/ 9/24	Letter, Brown to Carter, with memo	61627	14414
1875	10/15/24	Letter, Honiss to Rule, with memos	61634	14418
1876	8/ 8/24	Letter, Honiss to Carter	61639	14422
1877	10/ 6/24	Letter, Rule to Milans	61640	14423
1878	10/13–15/25	Memo by C. B. Belknap and Carter	61642	14424
1879	9/15/26	Memo, unsigned	61647	14427
1880	1/24/29	Memo by Rule	61651	14430
1881	1/27/22	Extracts from Minutes of meeting of Executive Committee of Hartford-Fairmont Co	61656	
1881A	1/27/22	Extracts from Minutes of meeting of Executive Committee of Hartford-Fairmont Co	61658	14433
1882	Undated	Papers from Interference 45,287	27848	
1883	Undated	Memo by Peiler	61662	14436
1884	Undated	Chart re Hitchcock, Lott and Steimer	61664	14436C
1885	Undated	Papers from Interference 39,374	27953	
1886	Undated	Papers from Interference 39,428	27965	
1887	Undated	Papers from Interference 42,601	27972	
1888	Undated	List of Hartford stream feeding patents	20935	9894
1888A	Various	Copies of Hartford stream feeding patents	20936	
		Excerpts from Minutes of meetings of Executive Committee of Hartford-Fairmont Co.		
1889	5/18/21		61665	14437
1890	6/ 2/22		61667	
1891	11/ 2/21		61669	14438
1892	4/19/23		61671	14439
1893	7/ 7/24	Brief before Law Examiner in Interferences 48,326, etc., pp. 1, 43–53	27978	11101
1894	6/27/24	Affidavit of V. M. Dorsey in Interference 48,327	27988	

Exhibit Number	Date	Description	Original	Print
1895	7/ 1/24	Memo in Interferences 48,326 and 48,327, and affidavit of V. M. Dorsey	27990	
1896	6/30/24	Petition by Tucker & Reeves in Interferences 48,326 and 48,327, and affidavit of E. P. Corbett	27997	
1897	6/27/24	Notice and affidavit of V. M. Dorsey in Interference 48,326	28009	
1898	6/27/24	Notice and affidavit of V. M. Dorsey in Interference 48,327	28013	
1899	6/27/24	Affidavit of V. M. Dorsey in Interference 48,328	28017	
1900	6/29/24	Affidavit of V. M. Dorsey in Interference 48,329	28019	
1901	6/27/24	Affidavit of V. M. Dorsey in Interference 48,330	28021	
1902	6/27/24	Notice and affidavit of V. M. Dorsey in Interference 48,447	28023	
1903	6/ 8/25	Minutes of meeting of Executive Committee of Hartford-Empire Co	61675	
1904	7/ 7/25	Minutes of meeting of directors of Hartford-Empire Co	61677	14441
1905	7/ 9/25	Letter, Dorsey to F. G. Smith	61682	14444
1906	8/22/25	Memo, unsigned	61684	14445
1907	9/19/25	Petition and memo in Interferences 48,326, etc	28026	
1908	12/29/25	Letter, Dorsey to Falck	61688	14448
1909	1/ 8/26	Memo, unsigned	61697	14454
1910	6/12/30	Letter, Beatty to F. G. Smith	61703	14459
1911	6/18/30	Letter, F. G. Smith to Beatty	61708	14465
1912	10/ 3/30	Letter, Brown to Carter	61712	14468
1913	10/16/30	Letter, Carter to Brown	61713	14469
1914	10/20/30	Letter, Carter to Brown	61714	14469
1915	12/11/23	Letter, Honiss to Dorsey	61715	
1916	6/25/24	Letter, Dorsey to F. G. Smith	61717	
1917	6/27/24	Letter, F. G. Smith to Dorsey	61719	
1918	6/25/24	Letter, Dorsey to Byrnes	61721	14470
1919	8/ -/23	Answer of defendants in Owens Bottle Co. v. J. T. & A. Hamilton Co. et al	61723	14471
1920	4/18/27	Minutes of meeting of Executive Committee of Hartford-Empire Co	61724	14475
1921	3/29/26	Memo, Eldred to Hunter	61736	14476
1922	8/ 3/25	Report by Hunter	61737	14478
1923	8/10/25	Letter, Brown to Carter	51738	14479

Exhibit Number	Date	Description	Original	Print
1924	2/28/25	Memo, Hunter to F. G. Smith	61739	
1925	4/25/22	Letter, Falck to F. G. Smith	61740	14489
1926	4/25/22	Letter, Falck to F. G. Smith	61749	14489
1927	1/ 9/23	Letter, Falck to F. G. Smith	61751	14491
1928	7/25/23	Letter, Falck to Dorsey	61752	14492
1929	Undated	List of Empire Machine Co. officers and directors	61754	14495
1930	Undated	List of Corning Glass Works directors	61760	14499
1931	6/ 8/16	Letter, Dorsey to Falck	61762	14500
1932	6/ 9/16	Letter, Falck to Dorsey	61764	
1933	6/13/16	Letter, Falck to Dorsey	61766	14501
1934	8/24/27	Letter, Lorenz to Lynch Glass Machinery Co	61769	
1935	9/12/31	Memo by Lorenz	61770	14502
1936	8/ 3/25	Report by Hunter	61771	14504A
1937	8/12/25	Report by Clark	61772	14504B
1938	12/17/40	Letter, Hamilton to F. G. Smith	61773	
1939	12/19/40	Memo, Hanson to Eldred	61775	
1940	12/13/32	Memo by Brown	61776	14505
1941	1/10/33	Memo by Brown	61784	14512
1942	11/11/32	Memo by Brown	61786	14512
1943	Undated	Tabulation, "Data for Chart 12"	61792	
1944	Undated	Tabulation, "Data for Chart 13"	61793	
1945	Undated	Tabulation, "Data for Chart 14"	61794	
1946	Undated	Chart of glass container production	61795	14520
1948	Undated	Tabulation, Epstein work data	61796	14520B
1949	2/ 8/22	Memo by F. G. Smith	61797	14521
1950	4/ 5/22	Memo, unsigned	61798	14521
1951	4/ 6/22	Letter, Dorsey to F. G. Smith	61801	14524
1952	4/ 8/22	Letter, H. K. Smith to Dorsey	61802	14525
1953	4/11/22	Letter, F. G. Smith to Dorsey	61803	14526
1954	4/11/22	Letter, F. G. Smith to Dorsey	61804	14527
1955	4/18/22	Opinion, Bartlett et al. to F. G. Smith	61806	14528
1956	4/21/22	Letter, H. K. Smith to Dorsey	61817	14532
1957	4/22/22	Letter, Dorsey to H. K. Smith	61818	14532B
1958	4/25/23	Letter, F. G. Smith to Dorsey	61820	14532D
1959	Undated	Memo by Dorsey	61821	14533
1960	9/10/23	Letter, F. G. Smith to Dorsey	61824	14534
1961	10/22/23	Letter, Dorsey to F .G. Smith	61826	14534C
1962	1/26/24	Letter, Honiss to F. G. Smith	61828	14535
1963	2/ 9/24	Letter, Dorsey to Falck	61830	
1964	2/28/24	Letter, Dorsey to F. G. Smith	61833	14536
1965	4/ 9/24	Letter, Dorsey to F. G. Smith	61835	14537
1966	4/19/24	Letter, Dorsey to Carter	61838	14540

Exhibit Number	Date	Description	Original	Print
1967	9/30/22	Memo by H. K. Smith	61839	
1968	11/ 6/24	Letter, F. G. Smith to Baker	61842	14541
1969	6/18/25	Letter, Dorsey to F. G. Smith	61845	14543
1970	Undated	Memo by Dorsey	61848	
1971	7/ 9/25	Letter, Dorsey to Falck	61850	14546
1972	8/12/25	Memo, Carter to Boehart	61854	14551
1973	12/26/23	Letter, F. G. Smith to Dorsey	61856	
1974	6/ 3/24	Letter, F. G. Smith to Dorsey	61857	14553
1975	12/24/24	Letter, Dorsey to F. G. Smith	61859	14555
1976	1/14/25	Letter, Dorsey to Brown	61860	14556
1977	6/29/26	Letter, Brown to Parmelee	61863	14559
1978	9/ 4/26	Letter, Brown to Carter	61864	14559
1979	12/17/26	Letter, Brown to Byrnes	61865	14560A
1980	12/20/26	Letter, Byrnes to Dorsey	61866	14560B
1981	7/ 2/28	Excerpts from proceedings before Master in Hartford-Empire Co. v. Lamb Glass Co.	61867	14561
1982	Undated	Chart, "Chart 11 with other curves added"	61883	14567
1983	12/18/41	Memo, Epstein to Goodrich	61884	14568
1984	4/15/20	Letter, Dorsey to Falck	61885	14569
1985	5/24/20	Letter, F. G. Smith to Falck	61904	14582
1986	9/23/20	Letter, Dorsey to Falck	61905	14583
1987	2/ 4/21	Letter, F. G. Smith to Falck	61910	14588
1988	9/24/21	Letter, Dorsey to Falck	61912	14590
1989	4/20/22	Letter, Dorsey to Falck	61914	14592
1990	Undated	Hartford-Empire patent and name plates for feeder	21123	9894A
1991	Undated	List of patents on Ex. 1990 and not on Ex. H-5915	21124	9895
1992	Undated	Summary of patents on Exs. 1990 and H-5915	21127	9896
1993	1/25/24	Report by Cramer	61923	14601
1994	3/24/24	Letter, Winter to Davis	61928	14607
1995	1/27/24	Letter, Carter to W. J. Belknap	61935	14610
1996	2/ 7/24	Letter, Carter to Davis	61936	14611
1997	2/ 8/24	Letter, Davis to Carter	61940	14614
1998	4/ 1/24	Letter, W. J. Belknap to Davis	61943	14615
1999	2/28/24	Letter, Carter to Davis	61944	14615
2000	2/ 5/30	Memo, Blunt to Buck	61953	14625
2001	5/23/35	Letter, Blunt to F. G. Smith	61960	14631
2002	9/28/37	License and Lease No. H8F-378, Hartford-Empire Co. to Pittsburgh-Corning Corp.	19493	9515

Exhibit Number	Date	Description	Original	Print
2003	9/14/39	License and Lease No. HSF-414, Hartford-Empire Co. to Kimble Glass Co.	19520	9515
2004	2/16/29	License of Pratt-Rankin patent rights, Hartford-Empire Co. to Owens-Illinois Glass Co.	19548	9515
2005	5/17/32	Minutes of meeting of Hartford-Empire Co. directors	61962	14633
2006	Undated	List of Miller feeders licensed to Knox after 8/25/32	61964	14634
2007	Undated	List of decisions in interferences	61965	14635
2008	Undated	List of certain Owens patents issued on applications in interferences	21128	9897
2009	Undated	Memo re comparative costs of Ball fruit jars and packers' jars	61987	14657
2010	Undated	Corrections to Exs. B-6078, B-6079 and B-6080	61988	14657
2011	Undated	Statement of glass container shipments compared with capacity	61989	14658
2012	1/ 8/42	Letter, Sommerfeld to Lewis	61990	14659
2013	12/19/41	List of machines sold by Swisvale Glass Machinery Corp.	61991	14660
		Photos and Descriptions of Machines, Swisvale Glass Machine Corp. and W. J. Miller		
2014	Undated	Model DEC machine	61998	
2015	Undated	Model HBB machine	62000	
2016	Undated	Model RAB machine	62003	
2017	Undated	Model SAC machine	62005	
2018	Undated	Model HFA machine	62009	
2019	Undated	Model PCE machine	62010	
2020	Undated	Model DAC and DAF machines	62014	
2021	Undated	Model DGA machine	62018	
2022	Undated	Model YBA machine	62019	14667
2023	Undated	Model PCG machine	62021	
2024	Undated	Model AGL machine	62023	
2025	Undated	Model AGO and AGP machines	62025	
2026	Undated	Model AAL machine	62027	
2027	Undated	Model DGC machine	62031	
2028	Undated	Model AGR machine	62033	
2029	Undated	Model A machine	62035	14669
2030	1/26/31	Memo by Soubier	62037	14671
2031	9/18/31	Memo, McLaughlin to Flexon	62042	
2032	Undated	Stipulation between U. S. and Glass Container Association re MacKaye correspondence	16291	8503

File Wrapper contents of interferences

Exhibit Number	Date	Description	Original	Print
2033	.....	Interference 48,567	28030	
2034	.....	Interference 49,822	28051	
2035	.....	Interference 50,785	28062	
2036	.....	Interference 50,892	28232	
2037	.....	Interference 51,026	28501	11112
2038	.....	Interference 53,342	28535	
2039	.....	Interference 53,504	28551	
2040	.....	Interference 53,729	28694	11113
2041	.....	Interference 53,835	28830	11116
2042	.....	Interference 53,852	28846	
2043	.....	Interference 54,021	28864	11118
2044	.....	Interference 54,328	28896	
2045	.....	Interference 54,330	29053	
2046	.....	Interference 54,958	29065	
2047	.....	Interference 54,997	29157	11120
2048	.....	Interference 55,101	29171	
2049	.....	Interference 55,240	29183	
2050	.....	Interference 55,295	29466	11122
2051	.....	Interference 55,420	29476	
2052	.....	Interference 55,441	29555	
2053	.....	Interference 55,646	29757	11124
2054	.....	Interference 55,647	29936	
2055	.....	Interference 56,234	29953	
2056	.....	Interference 56,263	29968	
2057	.....	Interference 56,370	29979	
2058	.....	Interference 56,579	30024	
2059	.....	Interference 56,930	30040	
2060	.....	Interference 57,026	30160	
2061	.....	Interference 57,809	30220	
2062	.....	Interference 58,895	30237	11127
2063	.....	Interference 58,917	30256	11129
2064	.....	Interference 59,168	30269	
2065	.....	Interference 59,317	30310	
2066	.....	Interference 59,471	30365	
2067	.....	Interference 59,967	30373	
2068	.....	Interference 60,700	30400	11130
2069	.....	Interference 60,734	30416	
2070	.....	Interference 60,735	30440	
2071	.....	Interference 61,630	30470	11132
2072	.....	Interference 62,560	30480	
2073	.....	Interference 62,611	30511	
2074	.....	Interference 62,766	30527	
2075	.....	Interference 62,767	30877	
2076	.....	Interference 62,768	30946	
2077	.....	Interference 63,120	30962	

File Wrapper contents of interferences (Cont.)

Exhibit Number	Date	Description	Original	Print
2078	.....	Interference 63,765.....	31085	
2079	.....	Interference 64,654.....	31134	
2080	.....	Interference 64,844.....	31144	
2081	.....	Interference 64,845.....	31247	
2082	.....	Interference 66,503.....	31256	
2083	.....	Interference 66,908.....	31274	
2084	.....	Interference 69,322.....	31283	
2085	.....	Interference 69,357.....	31308	
2086	.....	Interference 70,333.....	31397	
2087	.....	Interference 71,782.....	31413	
2088	.....	Interference 73,076.....	31471	
2089	.....	Interference 73,253.....	31481	
2090	.....	Interference 73,363.....	31492	
2091	.....	Interference 73,801.....	31502	
2092	.....	Interference 75,007.....	31658	11134
H-5001	7/23/15	Report by Cunningham, Peiler and F. G. Smith.....	62044	14675
H-5002	Undated	Stipulation between U. S. and Hartford-Empire Co. re financial data of Hartford-Fairmont and Hartford-Empire companies	16297	8506
H-5003	4/ 3/20	Letter, Falck to F. G. Smith.....	62061	
H-5004	4/ 2/20	Memo, "Data from Corning Co."	62062	14686
H-5005	11/17/20	Excerpt from Minutes of meeting of Executive Committee of Hartford-Fairmont Co.....	62088	14693
H-5006	3/ /24	Memo by F. G. Smith.....	62089	14694
H-5007	10/15/24	Letter, Dorsey to F. G. Smith...	62095	14701
H-5008	6/26/25	Memo, Honiss, Dorsey and Brown to F. G. Smith.....	62097	14702
H-5009	7/ 6/25	Memo, Honiss, Dorsey and Brown to F. G. Smith.....	62103	14707
H-5010	7/ 6/25	Memo, Brown to F. G. Smith....	62105	14709
H-5011	4/26/28	Letter, H. K. Smith to Mandeville	62107	14711
H-5012	6/29/29	Schedule C of License and Lease No. HSF-174, Hartford-Empire Co. to Macbeth-Evans Glass Co.....	19556	9517
H-5013	11/21/32	Letter Agreement between Hartford-Empire Co. and Macbeth-Evans Glass Co.....	19578	9519
H-5014	6/ 1/29	Letter, Curtiss to F. G. Smith...	62110	14714
H-5015	12/14/31	Schedule C of License and Lease No. HSF-226, Hartford-Empire Co. to Bartlett-Collins Co....	19583	9525

Exhibit Number	Date	Description	Original	Print
H-5016	11/23/39	Letter Agreement between Hartford-Empire Co. and Bartlett-Collins Co.	19609	9526A
H-5017	2/ 7/38	Letter, F. G. Smith to A. Houghton	62111	14715
H-5018	2/ 5/38	Letter, W. J. Belknap to F. G. Smith	62112	14716
H-5019	2/ 5/38	Letter, W. J. Belknap to F. G. Smith	62115	14719
H-5020	2/ 5/38	Letter, W. J. Belknap to F. G. Smith	62116	14720
H-5021	12/16/35	Letter, F. G. Smith to The Attorney General	62118	14723
H-5022	4/18/36	Letter, Brown to F. C. Ball	62119	14724
H-5023	5/10/37	Letter, Brown to G. A. Ball	62122	14727
H-5024	5/10/37	Letter Agreement, Hartford-Empire Co. and Ball Bros. Co.	19611	9526C
H-5025	10/ 8/40	Minutes of meeting of directors of Hartford-Empire Co.	62126	14731
H-5026	8/ 1/40	Contract amending General Feeder License Agreement between Hartford-Empire Co. and Ball Bros. Co. (Ex. 199)	19613	9527
H-5027	9/18/40	Contract between Hartford-Empire Co. and Lynch Corp., amending Ex. 330	19625	9532
H-5028	9/18/40	Contract between Hartford-Empire Co. and Lynch Corp. (Amended Feeder License)	19648	9538
H-5029	9/23/40	Assignment from Hartford-Empire Co. to Corning Glass Works	19651	9539
H-5030	9/23/40	Contract between Hartford-Empire Co., Corning Glass Works and Empire Machine Co.	19655	9540
H-5031	12/ 1/40	Contract between Hartford-Empire Co. and Corning Glass Works, modifying Ex. H-5030	19658	9542
H-5032	3/11/41	Contract between Hartford-Empire Co. and American Thermos Bottle Co.	19660	9544
H-5033	3/ 4/41	Supplemental Agreement between Hartford-Empire Co. and Federal Glass Co.	19666	9547
H-5034	3/ 3/41	Supplemental Agreement between Hartford-Empire Co. and Maryland Glass Corp.	19674	9549
B-5035	10/16/40	Letter, F. C. Ball to Underwood	19684	9554A

Exhibit Number	Date	Description	Original	Print
B-5036	10/21/40	Letter, Underwood to F. C. Ball..	62131	14736
H-5037	2/20/36	Letter, Pease to Day.....	62132	
H-5038	1/18/36	Telegram, Eldred to Day.....	62133	
H-5039	1/21/36	Letter, Day to Eldred.....	62134	
H-5040	1/24/36	Letter, Pease to Day.....	62135	
O-5041	6/20/28	Letter, Carter to Brown.....	62136	14736B
O-5042	6/ 8/28	Letter, Carter to Graham.....	62138	14737
O-5043	7/23/28	Letter, Carter to Brown.....	62139	14738A
O-5044	6/13/28	Letter, Lynch to Soubier.....	62140	14739
O-5045	6/15/28	Letter, Lynch to Soubier.....	62141	14739
O-5046	7/25/28	Letter, Parham to Carter.....	62142	14740
O-5047	8/13/28	Letter, Brown to Carter.....	62144	14741
C-5048	11/15/20	Letter, Falck to F. G. Smith.....	62146	14742
C-5049	6/30/27	Letter, Falck to F. G. Smith.....	62149	14745
C-5050	Undated	Offer of sale, Monongah Glass Co. to H. K. Smith.....	62153	14749
C-5051	11/25/27	Letter, H. K. Smith to Falck.....	62154	14750
C-5052	12/20/27	Telegram, Falck to H. K. Smith..	62155	14750B
H-5053	6/ 9/34	Letter, Brown to Knape-Coleman Glass Co.....	62156	
H-5054	6/14/34	Letter, Coleman to Brown.....	62159	
H-5055	6/19/34	Letter, Pease to Coleman.....	62160	
H-5056	9/24/34	Telegram, Hartford-Empire Co. to Knape-Coleman Glass Co.....	62162	
H-5057	10/31/34	Telegram, Hatch to Knape-Coleman Glass Co.....	62163	
H-5058	12/17/34	Telegram, Brown to Coleman....	62164	
H-5059	10/26/34	Telegram, Knape-Coleman Glass Co. to Hatch.....	62166	14750C
H-5060	10/27/34	Telegram, Hatch to Knape-Coleman Glass Co.....	62167	14750D
H-5061	8/15/34	Letter, Hatch to Knape-Coleman Glass Co.....	62168	14751
H-5062	9/11/34	Letter, Hatch to Knape-Coleman Glass Co.....	62170	
H-5063	2/16/35	Resolution of stockholders of Knape-Coleman Glass Co.....	62171	
H-5064	5/ 3/35	Letter, Neill to Brown.....	62172	
H-5065	8/20/35	Letter, Coleman to Hunter.....	62174	14752
H-5066	8/22/35	Letter, Hunter to Coleman.....	62175	14753
H-5067	8/27/35	Letter, Coleman to Hunter.....	62176	14753
H-5068	4/21/38	Opinion of C.C.A. 4 in Hartford-Empire Co. v. Swindell Bros., Inc., 95 F. (2d) 227.....	62177	
H-5069	10/ 4/38	Opinion of C.C.A. 4 on rehearing in Hartford-Empire Co. v. Swindell Bros., Inc., 99 F. (2d) 61..	62191	

Exhibit Number	Date	Description	Original	Print
H-5070	2/ 9/39	Letter, Amaler-Morton Co. to McKee Glass Co.	62196	14754
H-5071	12/29/38	Letter, Dugan to Pease	62198	14756
O-5072	5/17/24	Extract from "The Glass Worker"	62199	14757
HA-5073	Undated	List of Hartford suits and patents against Hasel-Atlas in June, 1932	62200	14758
HA-5074A	—/—/25	Draft of bill of complaint, Hasel-Atlas Glass Co. v. Owens Bottle Co. et al	62201	14758
HA-5074B	—/—/25	Draft of order for interrogatories	62208	14763
HA-5074C	2/ 1/26	Letter, Philbin to McNash	62210	14764
HA-5075A	8/ 4/24	Letter, McNash to Philbin	62211	14766
HA-5075B	7/30/24	Letter, Philbin to McNash	62212	14767
HA-5075C	7/22/24	Letter, Boshart to McNash	62213	14767
HA-5075D	7/11/24	Letter, McNash to Brady	62214	14768
HA-5076A	6/18/32	Letter, Philbin to Brown	62215	14768
HA-5076B	6/20/32	List of Hasel-Atlas patents	21130	9897
HA-5077	1933	Stationary Plug Letters	62216	14769
HA-5077A	1/11/32	Letter, W. J. Belknap to Philbin, with list of patents	62217	
HA-5077B	1/17/33	Letter, A. M. Algeo to Philbin	62221	
	1/ 8/33	Memo by A. M. Algeo	62222	
HA-5077C	2/ 1/33	Letter and memo, Philbin to A. M. Algeo	62224	
HA-5077D	3/ 2/33	Letter, Philbin to Brown	62230	
HA-5077E	3/ 2/33	Letter and memo, Philbin to A. M. Algeo	62232	
HA-5077F	3/ 3/33	Letter, Brown to Philbin	62237	
HA-5077G	3/ 8/33	Letter, Philbin to A. M. Algeo	62238	
HA-5077H	3/21/33	Letter, A. M. Algeo to Philbin	62240	
HA-5077I	4/ 7/33	Letter and sketch, Philbin to Brown	62246	
HA-5077J	4/18/33	Letter, W. J. Belknap and Brown to F. G. Smith	62250	
HA-5077K	5/24/33	Letter, Brown to A. M. Algeo	62256	
HA-5077L	5/29/33	Letter, Brown to A. M. Algeo	62258	
HA-5077M	6/ 2/33	Letter, A. M. Algeo to Philbin	62259	
HA-5077N	6/ 6/33	Letter, Philbin to Brown	62261	
HA-5077O	6/ 7/33	Letter, Brown to Philbin	62262	
HA-5077P	7/18/33	Letter, F. G. Smith to McNash	62263	
HA-5077Q	7/22/33	Letter, McNash to F. G. Smith	62264	
HA-5077R	7/31/33	Letter, McNash to F. G. Smith	62265	
HA-5077S	8/ 2/33	Letter, F. G. Smith to McNash	62266	
HA-5078	9/ 5/30	Letter, Eccleston to A. M. Algeo	62267	14804
HA-5079	1/14/26	Letter, Hartford-Empire Co. to Hasel-Atlas Glass Co.	62268	

Exhibit Number	Date	Description	Original	Print
	2/ 4/26	Letter, Hartford-Empire Co. to Kearns-Gorsuch Bottle Co.....	62269	
	2/26/26	Letter, Hartford-Empire Co. to Hazel-Atlas Glass Co.....	62270	
	6/21/27	Letter, Hartford-Empire Co. to Kearns-Gorsuch Bottle Co.....	62271	
	12/ 6/27	Letter, Brown to Philbin.....	62272	
	5/14/30	Letter, Hartford-Empire Co. to Hazel-Atlas Glass Co. of Oklahoma.....	62273	
HA-5080	Undated	List of Hazel-Atlas feeder and former patents.....	21135	
HA-5081	6/28/24	Final decree in Owens-Bottle Co. v. J. T. & A. Hamilton Co. et al.	62274	14805
HA-5082	7/28/32	Letter, A. M. Algeo to Harding..	62276	14806
HA-5084	7/ 8/32	Letter, Philbin to J. W. Davis...	62277	14806
	7/11/32	Letter, J. W. Davis to Hazel-Atlas Glass Co.....	62280	14808
	7/11/32	Letter, J. W. Davis to Philbin...	62282	14810
HA-5085	7/27/33	Letter, W. E. Levis to McNash..	62283	14810
HA-5086	7/27/33	Draft of letter, Hazel-Atlas Glass Co. to Hartford-Empire Co....	62285	14812
HA-5087	10/ 4/35	Letter, Philbin to McNash.....	62286	14812
H-5089	4/16/35	Copy of Kucera patent 1,997,798.	21818	
H-5090	4/16/35	Copy of Kucera patent 1,997,799.	21830	
H-5091	3/28/39	Copy of Kucera patent, Reissue 21,037.....	21848	
H-5092	7/16/34	Letter, Fingold to Safford.....	62288	
H-5092A	7/17/34	Letter, Safford to Fingold.....	62291	
H-5093	7/ 6/36	Letter, Kucera to Eldred.....	62292	
H-5094	7/20/36	Letter, Safford to Kucera.....	62293	
LC-5095	-/ -/33	Circular re Lynch Corp. capital stock.....	62295	
LC-5096	8/23/33	Contract — Supplemental Agreement between Hartford-Empire Co. and Lynch Corp.....	19685	9555
LC-5096A	8/23/33	Contract between Owens-Illinois Glass Co. and Lynch Corp., with attached copy of Ex. LC-5096.....	19689	9557
LC-5096B	2/16/40	Contract — Supplemental Agreement between Owens-Illinois Glass Co. and Lynch Corp....	19694	9558
LC-5097	8/23/33	Contract — Additional Agreement between Hartford-Empire Co. and Lynch Corp.....	19695	9559

Exhibit Number	Date	Description	Original	Print
LC-5098	2/ 2/34	Contract — Supplemental Agreement between Hartford-Empire Co. and Lynch Corp.....	19698	9561
LC-5099	2/28/38	Contract between Owens-Illinois Glass Co. and Lynch Corp. re MB machine.....	19701	9563
H-5100	8/23/33	Form of Lynch sales contract....	19703	9564
H-5101	1/ 6/31	Copy of Lynch & Bridges patent 1,788,312.....	21866	9901
H-5102	9/13/27	Copy of Steimer patent 1,642,430.	21926	9960
H-5103	4/ 7/31	Copy of Lorens patent 1,800,191..	21932	9966
H-5104	8/11/31	Copy of Lorens patent 1,818,725..	21998	10032
H-5105	2/ 2/32	Copy of Ingle patent 1,843,160...	22015	10050
H-5106	3/15/32	Copy of Sears patent 1,849,555...	22051	10086
H-5107	8/ 4/36	Copy of Bridges patent 2,049,422.	22109	
H-5108	2/20/34	Copy of Headley & Thompson patent 1,948,218.....	22161	10144
H-5109	2/20/34	Copy of Headley & Thompson patent 1,948,219.....	22205	10186
H-5110	3/31/36	Letter, Brown to Werbe.....	62299	14815
H-5111	6/14/37	Letter, R. H. Jackson to F. G. Smith.....	62301	14817
H-5112	6/23/37	Letter, Brown to The Attorney General.....	62302	14818
H-5113	7/ 6/37	Letter, R. H. Jackson to Brown..	62304	14820
H-5114	7/13/37	Letter, F. G. Smith to The Attorney General.....	62305	14821
LC-5115	Undated	Form of Lynch sales contract....	19704	9568
AH-5116	7/25/27	Letter, H. K. Smith to Rodgers..	62306	14821
AH-5117	7/27/27	Telegram, Mackubin Goodrich & Co. to Rodgers.....	62307	14822
AH-5118	8/12/27	Letter, Legg to Hartley.....	62308	14823
AH-5119	10/ 7/27	Letter, Hartley to I. J. Collins...	62309	14824A
AH-5120	12/ 9/30	Contract — Protective Agreement of common stockholders of Turner Glass Co.....	19705	9569
AH-5121	12/10/31	Lease, Monongah Glass Co. to General Glass Corp.....	19718	9570
AH-5122	8/15/31	Letter, Brown to I. J. Collins....	62310	14825
AH-5123	10/14/31	Letter, H. K. Smith to I. J. Collins.....	62311	14826
AH-5124	12/10/31	Letter, F. G. Smith to Mandeville.	62313	14828
AH-5125	12/11/31	Letter, Mandeville to F. G. Smith.	62314	14829
AH-5126	12/16/31	Letter, Mandeville to I. J. Collins.	62315	14830
AH-5127	12/ –/31	Letter, F. G. Smith to Mandeville.	62316	14831
AH-5128	12/16/31	Letter, Mandeville to F. G. Smith.	62317	14832

Exhibit Number	Date	Description	Original	Print
AH-5129	10/29/37	Contract between Hocking Glass Co. and Anchor Cap Co	19732	
H-5130	12/13/32	Letter, Saperston to Hartford-Empire Co	62318	14833
H-5131	1/10/33	Letter, Warren to Hartford-Empire Co	62321	
H-5132	2/ 1/26	Letter, Hatch to Columbia University	62322	
H-5133	3/ 3/26	Letter, Columbia University to Hatch	62323	
H-5134	12/29/39	Excerpts from Bottle Blowers' Union Reports	58208	
H-5135	3/15/26	Letter, Hatch to Carter	62324	14837
H-5136	3/20/26	Letter, Carter to Hatch	62326	14839
H-5137	4/ 6/26	Letter, Soubier to Hatch	62328	14841
H-5138	4/17/26	Letter, Carter to Hatch	62329	14842
H-5139	4/15/26	Telegram, Hatch to Carter	62336	
H-5140	4/28/26	Letter, Hatch to Carter	62337	
H-5141	5/19/26	Letter, Carter to Hatch	62339	14849
H-5142	5/24/26	Letter, Hatch to Clarke	62340	14849
H-5143	5/27/26	Letter, Clarke to Hatch	62341	14850A
H-5144	6/ 7/26	Letter, Hatch to Carter	62342	
H-5145	6/30/26	Letter, Clarke to Hatch	62344	
H-5146	7/ 7/26	Telegram, Clarke to Hatch	62345	14850B
H-5147	7/12/26	Letter, Kimes to Hatch	62346	
H-5148	7/13/26	Letter, Kimes to Clarke	62347	
H-5149	7/14/26	Letter, Hatch to Clarke	62348	
H-5150	7/26/27	Memo by Hatch	62349	
H-5151	7/15/32	Letter, Carter to Hatch	62350	14850C
H-5152	4/26/26 7/ 8/26	Signed Clarke article	62351	14851
H-5155	6/30/26	Letter, Clarke to Maloney	62366	14861
H-5156	7/ 7/26	Letter, Maloney to Clarke	62367	14862
H-5157	Undated	Typed Clarke article, printer's copy	62368	
H-5159	5/ -/32	Excerpts from Bottle Blowers' Union Reports	58525	
H-5160	5/24/32	Affidavit by Clarke	62381	14862
H-5161	5/ 6/27	Letter, Clarke to Hatch	62382	
H-5162	5/ 6/27	Telegram, Hatch to Clarke	62383	
H-5163	5/ 6/27	Letter, Hatch to Clarke	62384	
H-5164	12/10/28	Letter, Hatch to Clarke	62386	
H-5165	12/12/28	Letter, Clarke to Hatch	62387	
H-5166	12/17/28	Letter, Hatch to Clarke	62388	
H-5167	12/18/28	Letter, Clarke to Hatch	62389	
H-5168	2/13/34	Letter, Hatch to Clarke	62390	14863
H-5169	2/16/34	Letter, Clarke to Hatch	62392	

Exhibit Number	Date	Description	Original	Print
H-5170	3/ 1/34	Letter, Hatch to Clarke	62393	
H-5171	3/ 7/34	Letter, Hatch to Clarke	62394	
H-5172	3/13/34	Letter, Clarke to Hatch	62396	
H-5173	3/28/34	Letter, Hatch to Clarke	62397	
H-5174	4/15/34	Letter, Clarke to Hatch	62398	
H-5175	5/15/34	Letter, Hatch to Clarke	62399	
H-5176	6/ 4/34	Letter, Clarke to Hatch	62400	
H-5177	6/12/34	Letter, Hatch to Clarke	62401	
H-5178	6/18/34	Letter, Clarke to Hatch	62402	14864
H-5179	4/11/36	Letter, Clarke to Hatch	62403	
H-5180	4/14/36	Letter, Hatch to Clarke	62404	
H-5181	5/ 1/36	Letter, Clarke to Hatch	62405	14865
H-5182	5/ 5/36	Letter, Hatch to Clarke	62406	
H-5183	5/26/36	Letter, Clarke to Hatch	62407	
H-5184	12/26/34	Letter, Moore to Hartford-Empire Co	62408	14866
H-5185	10/ 6/39	Letter, Nola Glass Industry to Pease	62409	14866B
H-5186	10/18/39	Letter, Nola Glass Industry to Pease	62411	14866D
O-5187	5/10/39	Contract between Corning Glass Works and Owens-Illinois Glass Co	19761	
GCA-5188	Undated	Stipulation between U. S. and Glass Container Association	16337	8543
GCA-5189	10/ 3/33	Glass Container Industry Code	62412	14867
H-5193	6/ 7/38	Letter, Avery to Pease	62425	14878
H-5194	6/10/38	Letter, Pearce to Avery	62426	
H-5195	6/20/38	Letter, Avery to Pearce	62427	14878B
H-5196	7/28/37	License No. BF-1, Hartford-Empire Co. to Swindell Bros. Inc.	19764	
H-5197	8/31/25	Letter, North Baltimore Bottle Glass Co. to Eldred	62428	14878C
H-5198	9/ 2/25	Letter, Eldred to North Baltimore Bottle Glass Co	62429	14879
H-5199	9/ 8/31	Letter, Crowell to Eldred	62430	14879
H-5200	9/15/31	Letter, Eldred to Crowell	62431	14880
H-5201	1/ 9/41	Letter, Binder to Pease	62432	14880A
H-5202	1/13/41	Letter, Pease to Binder	62434	14881
H-5203	1/16/41	Letter, Pease to Binder	62435	14881
H-5204	1/20/41	Memo, Russell to Pease	62436	14881
H-5205	1/21/41	Letter, Pease to Binder	62438	14883
H-5206	1/27/41	Letter, Binder to Pease	62440	14884
H-5207	1/30/41	Letter, Pease to Binder	62441	14885
O-5208	5/20/09	Contract between Owens Bottle Machine Co. et al. and Hazel-Atlas Glass Co	57577	12328

Exhibit Number	Date	Description	Original	Print
O-5209	10/16/03	License, Toledo Glass Co. to Owens Bottle Machine Co....	19790	9574
O-5210	11/17/09	License, Owens Bottle Machine Co. et al. to Greenfield Fruit Jar & Bottle Co.....	19798	9579
O-5211	?	Assignment of Ex. O-5210 to Ball Bros. Co.....	19815	9591
O-5212	5/28/08	Contract between Owens Bottle Machine Co. et al. and Thatcher Mfg. Co.....	19842	9608
O-5213	1/23/15	Notice of assignment of Ex. O-5210 to Ball Bros. Co.....	19848	9611
O-5214	7/ 2/17	Contract between Toledo Glass Co. and Owens Bottle Machine Co.....	19850	9612
O-5215	7/27/30	Contract between Owens-Illinois Glass Co. and Thatcher Mfg. Co.	19859	9617
H-5216	3/31/03	Copy of Brooke patent 723,983...	22229	10210
H-5217	12/10/19	Letter, Dorsey to Honiss.....	62442	14886
H-5218	9/17/20	Letter, F. G. Smith to Arkell....	62445	14889
H-5219	10/20/22	Letter, Dorsey to Honiss.....	62448	14892
H-5220	1/ 3/28	File wrapper contents, application for Peiler patent 1,655,391.....	50559	11859
H-5221	11/21/05	Copy of Hitchcock patent 805,068	22237	10218
H-5222	6/15/15	Copy of Hitchcock patent, Reissue 13,929.....	22245	10226
H-5223	5/12/16	Letter, Dorsey to A. B. Houghton.	62450	14894
H-5224	3/ 9/37	Copy of Steimer patent 2,073,571.	22253	10233
H-5225	12/ 8/25	Copy of Steimer patent 1,564,909.	22283	10263
H-5226	6/ 8/26	Copy of Steimer patent 1,588,393	22293	10273
H-5227	3/27/28	Copy of Steimer patent 1,663,925.	22303	10283
H-5228	10/24/16) various)	(Declaration of Interference 40,665 (File wrapper contents of Interference 40,665	31749	
H-5229	2/15/17	Letter, Dorsey to Falck.....	62463	14907
H-5230	Undated	Appeal record in Hartford-Empire Co. v. Coe, Commissioner of Patents.....	54626	12133
H-5231	6/28/21	Copy of Lott patent 1,382,993...	22307	
H-5232	6/28/21	Copy of Lott patent 1,382,994...	22319	10293
H-5233	1/18/16) various)	(Declaration of Interference 39,376 (File wrapper contents of Interference 39,376	31936	11184
H-5234	6/10/19) various)	(Declaration of Interference 43,442 (File wrapper contents of Interference 43,442	33224	11242
H-5235	4/17/23	Letter, Honiss to Dorsey.....	62469	

Exhibit Number	Date	Description	Original	Print
H-5236	11/ 3/23	Letter, Dorsey to Byrnes	62470	14913
H-5237	1/12/22	Letter, Dorsey to Falck	62473	14916
H-5238	5/15/23	Letter, Dorsey to F. G. Smith	62480	14923
H-5239	5/18/23	Report, Bartlett et al. to Hartford-Empire Co.	62483	14927
H-5240	6/19/23	Letter, Dorsey to F. G. Smith	62494	14933
H-5241	6/19/23	Memo by Dorsey	62497	14934
H-5242	1/15/24	Letter, Dorsey to H. K. Smith	62499	14936
H-5242A	1/10/24	Letter, C. B. Belknap to Dorsey	62504	
H-5243	6/ 3/25	Chart of interferences	62505	14941
H-5243A	6/24/25	Chart of interferences, by applications	62507	14943
H-5244	7/ 2/25	Chart of interferences, opponents' applications	62508	14944
H-5245	6/27/25	Chart of interferences, Hartford applications	62510	14946
H-5246	Undated	Chart of interferences, Tucker & Reeves applications	62512	14948
H-5247	Undated	Chart of interferences, Miller applications	62513	14949
H-5248	2/16/26	Copy of Peiler patent 1,573,742	22349	10323
H-5249	1/ 3/28	Copy of Peiler patent 1,655,391	22401	10401
		File Wrapper contents of interferences		
H-5250	.....	Interference 44,251	34108	11259
H-5251	.....	Interference 44,252	37303	11291
H-5252	.....	Interference 46,677	37309	11295
H-5253	.....	Interference 47,297	38793	11298
H-5254	.....	Interference 48,197	38891	
H-5255	.....	Interference 48,198	39058	
H-5256	.....	Interference 48,199	39184	
H-5257	.....	Interference 48,265	39251	
H-5258	.....	Interference 48,267	39290	
H-5259	.....	Interference 48,326	39408) 40566)	11309
H-5260	.....	Interference 48,327	39440	11302
H-5261	.....	Interference 48,328	41096	11306
H-5262	.....	Interference 48,329	41674	11430
H-5263	.....	Interference 48,330	42072	11433
H-5264	.....	Interference 48,331	42346	11435
H-5265	.....	Interference 48,414	42480	11441
H-5266	.....	Interference 48,415	42504	11445
H-5267	.....	Interference 48,477	42658	11447
H-5268	.....	Interference 49,069	43059	11451
H-5269	.....	Interference 50,632	43198	
H-5270	.....	Interference 50,782	43263	11454
H-5271	.....	Interference 50,783	43328	

File wrapper contents of interferences (Cont.)

Exhibit Number	Date	Description	Original	Print
H-5272	.....	Interference 50,890	43548	11467
H-5273	.....	Interference 50,891	43759	11472
H-5274	.....	Interference 50,895	44018	11477
H-5275	.....	Interference 51,313	44124	11481
H-5276	.....	Interference 51,314	44443	11520
H-5277	.....	Interference 51,876	44886	
H-5278	.....	Interference 52,072	44951	
H-5279	.....	Interference 52,257	44999	
H-5280	.....	Interference 52,258	45038	
H-5281	.....	Interference 52,259	45069	
H-5282	.....	Interference 52,260	45100	
H-5283	.....	Interference 52,338	45133	
H-5284	.....	Copy of Peiler patent 2,073,572	22437	10437
H-5285	8/22/33	Copy of Peiler patent 1,923,554	22449	10449
H-5286	3/17/31	Copy of Howard patent 1,797,206	22473	10473
H-5287	1/ 3/33	Copy of Howard patent 1,892,765	22487	10523
H-5288	10/10/23	Letter, Dorsey to F. G. Smith	62514	14950
H-5289	12/24/23	Letter, Dorsey to F. G. Smith	62518	14954
H-5290	12/29/23	Letter, Dorsey to F. G. Smith	62519	14955
H-5291	12/27/23	Letter, Dorsey to F. G. Smith	62521	14957
H-5292	12/ 2/24	Letter, Dorsey to F. G. Smith	62524	14960
H-5293	12/23/24	Letter, Dorsey to F. G. Smith	62527	14963
H-5294	3/ 1/23	Letter, F. G. Smith to Dodge	62533	14969
	3/21/23	Letter, Dodge to F. G. Smith	62535	14970
GCA-5295	5/ 9/29	Letter, King to Hartley	62536	14971
GCA-5296	5/ 7/29	Letter, Hartley to King	62538	14973
H-5297	12/19/27	Telegram, H. K. Smith to Thompson	62539	14974
H-5298	12/19/27	Letter, H. K. Smith to Thompson	62540	14975
H-5299	12/21/27	Letter, H. K. Smith to Thompson	62542	14977
H-5300	12/21/27	Telegram, H. K. Smith to Thompson	62544	14979
H-5301	12/23/27	Letter, Thompson to H. K. Smith	62545	14981
H-5302	8/ 8/30	Letter, F. G. Smith to Hartley	62546	
H-5303	8/26/30	Letter, Hartley to F. G. Smith	62547	14982A
H-5304	9/11/30	Letter, Hartley to F. G. Smith	62548	14982B
H-5305	9/11/30	Letter, Hartley to Williams and Collins	62549	14983
AH-5306	11/17/27	Minutes of meeting of directors of Monongah Glass Co.	62551	14984
AH-5307	11/18/27	Letter, Miller, Dailey & Thompson to H. K. Smith	62561	14990
AH-5308	12/15/27	Letter, Legg to Miller	62574	14994
AH-5309	12/16/27	Letter, Miller, Dailey & Thompson to Rodgers	62575	14995
AH-5310	12/17/27	Letter, Miller, Dailey & Thompson to National Bank of the Republic Co.	62576	14996

Exhibit Number	Date	Description	Original	Print
AH-5311	1/30/28	Letter, Rodgers to Thompson....	62577	14996
	1/30/28	Letter, Rodgers to H. K. Smith..	62578	14997
	1/30/28	Letter, Rodgers to Mackubin, Goodrich & Co.....	62579	14998
AH-5312	2/ 3/28	Telegram, Thompson to Hartley..	62580	
AH-5313	2/13/28	Letter, Thompson to Walker.....	62581	14999
AH-5314	3/30/28	Minutes of meeting of directors of Monongah Glass Co.....	62582	14999
AH-5315	3/30/28	Minutes of meeting of stockholders of Monongah Glass Co.	62589	15002
H-5316	1/26/33) 1/28/33)	Draft of license agreement between Hartford-Empire Co. and Ball Bros. Co. (top 3 pages, p. 4 and Schedule C).....	62596	15005
H-5317	2/ 3/33	Draft of license agreement between Hartford-Empire Co. and Ball Bros. Co. (pages 1, 4, 5 and Schedule C).....	62632	15008
H-5318	2/18/33	Draft of license agreement between Hartford-Empire Co. and Ball Bros. Co. (pages 1, 5 and Schedule C).....	62678	15012
H-5319	3/ 1/33	Draft of license agreement between Hartford-Empire Co. and Ball Bros. Co. (pages 1, 5 and Schedule C).....	62722	15015
H-5320	10/ 8/25	Letter, Brown to Dorsey.....	62768	15018
H-5321	12 /6/37	Contract — Nagle Lehr Agreement between Hartford - Empire Co. and Thatcher Mfg. Co.	19862	9619
H-5322	1/24/19	Letter, Hughes to Hartford - Fairmont Co.....	62770	15020
H-5323	10/11/22	Memo, F. G. Smith to H. K. Smith.....	62775	15025
H-5324	6/ 5/23	Letter, H. K. Smith to Lehmann & Lehmann.....	62776	15025
H-5325	11/ 6/23	Letter, H. K. Smith to Lehmann & Lehmann.....	62778	15027
H-5326	5/19/28	Letter, Lehmann & Lehmann to H. K. Smith.....	62780	
H-5327	6/17/35	Letter, Lehmann & Lehmann to Hartford-Empire Co.....	62784	
H-5328	6/19/35	Letter, Safford to Lehmann & & Lehmann.....	62785	
H-5329	8/18/38	TNEC subpoena (See Ex. 1774)..	62786	15028
H-5330	8/26/38	Letter, Arnold to Hartford-Empire Co.....	62790	15032A

Exhibit Number	Date	Description	Original	Print
H-5331	8/25/38	Memo by Safford	62791	
H-5332	8/30/38	Memo by Safford	62793	
H-5335	2/ 7/35	Contract — Sales Agreement between S. Mallinger et al. and Hartford-Empire Co	19874	9623
H-5336	2/21/33	Memo by Safford	62794	
H-5338	Undated	Chart—Hand gathering and feeding	62795	
H-5339	8/ 2/04	Chart—Owens suction process	62796	
H-5340	Undated	Chart—Brooke stream feed	62797	
H-5341	Undated	Chart—Press, press-and-blow and narrow-neck processes	62798	15032B
H-5342	Undated	Chart — Comparison of stream feeding and suspended charge feeding	62799	15032C
H-5343	Undated	Chart—Hartford Paddle Feeder	62800	
H-5344	Undated	Chart — Hartford Paddle - Needle Feeder	62801	
H-5345	11/23/14	Report by Peiler	62802	15033
H-5346	3/ -/12	Synopsis for agreement between Hartford - Fairmont Co. and Monongah Glass Co	62808	15034
H-5347	7/15/14	Report by Peiler	62821	15041
H-5348	Undated	Chart — Hartford Paddle - Needle Feeder	62836	15050A
H-5349	7/ 6/16	Memo by Peiler	62837	15050B
H-5350	9/29/17	Report by Peiler	62838	15050C
H-5351	10/ 2/17	Excerpt from Minutes of meeting of Executive Committee of Hartford-Fairmont Co	62839	15051
H-5352	2/16/18	Excerpt from Minutes of meeting of Executive Committee of Hartford-Fairmont Co	62840	15051
H-5353	11/15/18	Report by Peiler	62841	15052
H-5354	6/12/41	List of licensed feeders other than Hartford	62847	15046
H-5355A	various	Volume of Peiler patents, with index	51406	11997
H-5355B	various	Volume of Peiler patents, with index	52212	12027
H-5356	various	List of Hartford suction patents	22503	10539
H-5356A	various	Volume of Hartford suction patents	22507	
H-5356B	various	Volume of Hartford suction patents	22910	
H-5357	Undated	Chart—Full automatic process for manufacture of hollow glassware	62852	15059

Exhibit Number	Date	Description	Original	Print
H-5358	Undated	Chart—Plunger cam adjustments to produce different charge shapes	62853	
H-5359	Undated	Model of Hartford Single Feeder (physical)		
H-5360	Undated	Chart—Plunger impulse feeders	62854	15060
H-5361	Undated	Book of photographs of some of Hartford-Empire Company commercial machines	62855	15061
H-5361A	Undated	Photograph of Hartford Milk Bottle Machine	62869	15069
H-5362	Undated	Book of photographs, entitled "Hartford-Empire Company"	55026	
H-5363	-/ -/37	Book — "Operating Instructions for Hartford Single Feeder"	55094	
H-5364	Undated	Milk bottle (physical)		
H-5365	Undated	Milk bottle (physical)		
O-5366	1/30/24	Drawing—discharge pipe of Hitchcock feeder	62870	15070
O-5367	Undated	Drawing — sheer assembly of Hitchcock feeder	62871	15071
O-5368	11/14/23	Drawing — installation of Hitchcock feeder	62872	15072
O-5369	1/30/24	Drawing — diaphragm mechanism of Hitchcock feeder	62873	15073
O-5370	1/31/24	Drawing—assembly of Hitchcock feeder	62874	15074
O-5371	Undated	Photograph of Owens AE Machine	62875	15075
O-5372	Undated	Photograph of later Owens machine	62876	15076
H-5373	Undated	Half bottle made on Howard Autoblow Machine (physical)		
H-5374	7/13/15	Copy of Drey patent 1,146,694	23308	10541
H-5375	2/ 1/22	Letter, Bartlett to F. G. Smith	62877	15077
H-5376	2/ 2/22	Letter, Honiss to F. G. Smith	62879	15078
H-5377	2/ 1/21	Letter, Dorsey & Cole to Honiss	62882	15081
H-5378	2/ 2/21	Letter, Dorsey & Cole to Honiss	62883	
H-5379	4/17/20) 4/26/20) 5/17/20) 6/ 9/20) 10/19/20)	Marked copies of amendments to Howard application, Serial No. 180,795	45144	11523
H-5380	6/ 5/41	Papers from Interference 40,122	45162	11529
O-5381	Undated	Photograph of Graham machine	62884	15082
O-5382	Summer, 1920	Photograph of Lott demonstration device	62885	15083

Exhibit Number	Date	Description	Original	Print
O-5383	Fall, 1920	Photograph of Lott demonstration device	62886	15084
H-5384	Undated	Photograph of Chamberlin C Machine	62887	15085
H-5385	Undated	Photograph of Chamberlin E Machine	62888	15086
H-5386	3/26/18	Copy of Canfield patent 1,260,637	23313	10547
H-5387	2/19/18	Copy of Chamberlin patent 1,256,979	23341	10587
H-5388	12/ 2/20	Copy of Chamberlin British patent 138,895	23354	10605
H-5389	1/18/16	Declaration of Interference 39,375	45178	11531
H-5390	1/18/16	Declaration of Interference 39,377	45313	11539
H-5391	1/18/16	Declaration of Interference 39,379	45393	11543
H-5392	1/18/16	Declaration of Interference 39,429	45395	11545
H-5393	3/17/20	Letter, Dorsey to Falck	62889	15087
H-5394	3/16/20	Letter, Falck to Dorsey, with draft of waiver	62891	15087
H-5395	6/ 8/22	License from Empire Machine Co. to Corning Glass Works	19881	9626
H-5396	4/29/20	Letter, Dorsey to Falck	62894	15088
H-5397	12/ -/22	Excerpt from The Glass Industry	62899	15093
H-5398	Undated	Memo — Interferences declared prior to July, 1925, involving Hartford-Empire applications	62900	15095
H-5399	10/28/20	Memo by F. G. Smith	62929	15115
H-5400	Undated	Additional papers in Interference 45,287 (See Exs. 1882 and H-5401)	(45527 (62931	11548
H-5401	Undated	List of papers in Exs. 1882 and H-5400	62952	
H-5402	1/ 5/21	Letter, F. G. Smith to Dorsey	62954	15117
H-5403	1/ 7/21	Letter, Dorsey to F. G. Smith	62955	
H-5404	1917–1920	File wrapper contents of application for Howard patent 1,797,206 through declaration of Interference 45,287	45952	
H-5405	3/18/21	Letter, Dorsey to F. G. Smith	62956	15118
H-5406	7/12/21	Letter, Dorsey to F. G. Smith	62960	15122
H-5407	10/ 1/21	Letter, Dorsey to F. G. Smith	62964	15127
H-5408	10/ 4/21	Letter, F. G. Smith to Dorsey	62965	15127
H-5409	10/ 5/21	Letter, Dorsey to F. G. Smith	62967	15129
H-5410	5/10/22	Letter, Dorsey to F. G. Smith	62970	15132
H-5411	8/18/21	Letter, F. G. Smith to Dorsey	62977	15139
H-5412	9/ 3/21	Letter, Baker to Corning Glass Works	62978	15140
H-5413	8/30/21	Letter, Honiss to Dorsey	62979	15141

Exhibit Number	Date	Description	Original	Print
H-5413 (Cont.)	8/24/21	Letter, Ashcraft to H. K. Smith..	62980	15143
	8/19/21	Letter, Baker to Illinois Glass Co., with excerpt from license agreement between Owens Bottle Machine Co. et al. and Illinois Glass Co. et al.....	62983	15144
H-5414	9/ 6/21	Letter, Dorsey to F. G. Smith....	62988	15147
H-5415	11/ 3/21	Memo by Bartlett.....	62990	
H-5416	4/21/22	Letter, Dorsey to H. K. Smith....	62991	15149
H-5417	9/28/21	Letter, Dorsey to F. G. Smith....	62995	15153
H-5418	9/28/21	Letter, Dorsey to F. G. Smith....	62997	15155
H-5419	4/21/22	Letter, F. G. Smith to Dorsey....	63000	
H-5420	4/24/22	Letter, Dorsey to Howard.....	63002	
H-5421	6/ 2/22	Letter, Dorsey to Corbett.....	63003	
H-5422	5/12/23	Letter, F. G. Smith to Dorsey....	63004	15158
H-5423	5/31/24	Letter, Dorsey to Bartlett.....	63008	15162
H-5424	?	Stipulation to arbitrate Interference 48,948.....	46028	
H-5425	1/12/32	Copy of Lott patent 1,840,458...	23359	10615
H-5426	10/24/13	Drawings — part of Tucker & Reeves application.....	46031	
H-5427	6/21/32	Copy of Tucker & Reeves patent 1,864,275.....	23371	10627
H-5428	5/14/21	Letter, Dorsey to F. G. Smith....	63010	15165
H-5429	5/ 9/21	Letter, Heintselman to F. G. Smith.....	63015	
H-5430	9/ 5/22	Letter, F. G. Smith to Dorsey...	63022	15168
H-5431	10/16/22	Letter, Dorsey to Corbett.....	63023	15169
H-5432	10/21/22	Letter, Dorsey to Honiss.....	63024	15170
H-5433	10/21/22	Letter, Dorsey to Corbett.....	63027	15173
H-5434	11/ 9/22	Letter, Dorsey to Corbett.....	63029	15175
H-5435	11/17/22	Letter, Corbett to Dorsey.....	63036	15182
H-5436	11/20/22	Letter, Dorsey to Corbett.....	63038	15184
H-5437	2/21/23	Letter, Dorsey to F. G. Smith...	63040	15186
H-5438	8/ 8/23	Letter, Dorsey to Honiss.....	63043	15189
H-5439	9/19/23	Letter, Pickett to Dorsey & Cole et al.....	63044	15190
H-5440	10/ 9/23	Letter, Parham to Honiss.....	63045	15191
H-5441	4/18/24	Letter, Parham to Bartlett.....	63047	15193
H-5442	4/30/24	Letter, Parham to Honiss.....	63048	15194
H-5443	5/13/24	Letter, Parham to Honiss.....	63049	15195
H-5244	2/28/41	Contract — Supplemental Agreement between Hartford-Empire Co. and Diamond Glass Co.....	19893	9631
H-5445	9/14/36	Letter, Van Bibber to Pease.....	63050	15196
H-5446	11/ 4/36	Letter, Pease to Van Bibber.....	63052	15198
H-5447	11/ 7/36	Letter, Van Bibber to Pease.....	63053	15199

Exhibit Number	Date	Description	Original	Print
H-5448	5/28/24	Letter, Dorsey to Bartlett	63054	15200
H-5449	11/ 6/22	Letter, Corbett to Dorsey	63055	15201
H-5450	10/11/23	Order of Examiner in Interference 44,251	46033	
H-5452	10/25/23	Order of Examiner in Interference 44,251	46036	
H-5453	4/28/24	Order of Examiner in Interference 44,251	46039	
H-5454	4/12/24	Motion by Peiler in Interference 44,251	46040	
H-5455	5/ 7/24	Petition by Peiler in Interference 44,251	46045	
H-5456	5/13/24	Decision of Examiner in Interference 44,251	46047	
H-5457	5/13/24	Decision of Commissioner of Patents in Interference 44,251	46048	
H-5458	1/20/23	Letter, Dorsey to Corbett	63057	15203
H-5459	5/31/23	Memo, Honiss to F. G. Smith	63058	15204
H-5460	7/27/23	Letter, Brown to Dorsey	63063	15209
H-5461	9/10/23	Letter, Dorsey to Brown et al	63064	15210
H-5462	10/23/23	Letter, Dorsey to F. G. Smith	63065	
H-5463	6/12/23	Copy of Lott patent 1,458,834	23403	10659
H-5464	11/26/23	Letter, Dorsey to Honiss	63067	15211
H-5465	10/15/24	Letter, Dorsey to F. G. Smith	63070	15214
H-5466	11/12/24	Letter, Parham to Corbett	63072	15216
H-5467	2/ 6/25	Letter, Krey to Moses	63074	15218
H-5468	2/20/25	Letter, Krey to Honiss	63075	15219
H-5469	11/24/24	Letter, Corbett to Hartford-Empire Co.	63076	15220
H-5470	12/ 3/24	Telegram, Dorsey to F. G. Smith.	63077	
H-5471	10/21/24	Copy of Tucker & Reeves patent 1,512,566	23409	10665
H-5473	5/19/24	Letter, Brown to Lawrence	63078	15221
H-5474	5/22/24	Letter, Dorsey to Lawrence	63079	15222
H-5475	1/16/25	Letter, Dorsey to Lawrence	63081	15224
H-5476	12/ 4/23	Letter, Dorsey to F. G. Smith	63083	
H-5477	10/25/24	Letter, Dorsey to Eccleston	63085	15226
H-5478	10/25/24	Letter, Dorsey to McCallister	63087	15228
H-5479	2/ 7/25	Letter, Dorsey to Honiss	63088	15229
H-5480	2/18/25	Letter, Brown to Dorsey	63091	15232
H-5481	2/24/25	Letter, Dorsey to Ewing	63092	15233
H-5482	5/16/33	Copy of Tucker & Reeves patent 1,908,936	23415	10671
H-5483	6/ 6/25	Letter, Dorsey to F. G. Smith	63099	15240
H-5484	6/15/25	Letter, Dorsey to F. G. Smith	63103	15244
H-5485	8/ 1/25	Letter, Dorsey to Williams, with memo	63106	

Exhibit Number	Date	Description	Original	Print
H-5486	8/27/25	Power of attorney in Tucker & Reeves application, Hartford-Empire Co. to Brown	46049	11607
	9/ 8/25	Acceptance by Patent Office of said Power of Attorney		
H-5487	9/25/25	Letter, V. A. Dorsey to V. M. Dorsey	63126	
H-5488	12/ 4/25	Letter, Parham to Brown	63127	
H-5489	9/21/26	Copy of Rankin patent 1,600,361	23457	10727
H-5490	3/24/22	Letter, Honiss to Dorsey	63128	15247
H-5491	4/ 5/32	Copy of Lobb patent 1,852,171	23465	10741
H-5492	9/20/32	Copy of Lobb patent 1,878,942	23497	
H-5493	1/23/33	Letter, Dorsey to F. G. Smith	63132	
H-5494	12/12/23	Letter, Dorsey to Honiss	63133	15250
H-5495	1/17/23	Letter, Corbett to Dorsey	63135	
H-5496	12/ 3/24	Telegram, F. G. Smith to Dorsey	63137	15252
H-5497	5/15/24	Letter, Lawrence to Hutchinson	63138	
H-5498	5/16/24	Letter, Dorsey to Lawrence	63140	15253
H-5499	2/ 9/25	Letter, Dorsey to F. G. Smith	63142	15255
H-5500	3/17/22	Letter, Dorsey to F. G. Smith	63145	
H-5501	1/23/23	Telegram, F. G. Smith to Dorsey	63146	
H-5502	1/22/23	Memo, Honiss to F. G. Smith	63147	15256
H-5503	2/ 4/25	Letter, Dorsey to F. G. Smith	63149	
H-5504	8/14/25	Assignment, Tucker, Reeves & Beatty to Hartford-Empire Co.	19900	9632
H-5505	12/17/23	Letter, Honiss to Dorsey	63156	
H-5506	12/21/23	Letter, Dorsey to Honiss	63157	
H-5507	12/24/23	Letter, Dorsey to Honiss	63159	
H-5508	1/11/24	Memo by Honiss	63161	15258
H-5509	6/ 5/41	Papers from Interference 48,582	46052	11610
H-5510	6/ 5/41	Papers from Interference 50,700	46188	11620
H-5511	5/ 5/24	Letter, Honiss to Dorsey	63162	
H-5512	5/ 6/24	Letter, Dorsey to Honiss	63164	
H-5513	5/21/24	Letter, Dorsey to F. G. Smith	63167	15259
H-5514	5/27/24	Letter, Dorsey to Byrnes	63171	
H-5515	5/28/24	Letter, Dorsey to F. G. Smith	63174	15266
H-5516	7/ 3/24	Memo, unsigned	63177	15266
H-5517	7/ 7/24	Memo, unsigned	63179	
H-5518	11/21/41	Docket Index of Interference 50,700	46235	11627
H-5519	10/10/24	Letter, F. G. Smith to Dorsey	63180	15269
H-5520	10/13/24	Letter, Dorsey to F. G. Smith	63183	15271
H-5521	10/31/24	Letter, Dorsey to F. G. Smith, with memo	63190	
H-5522	5/ 5/24	Letter, Dorsey to Honiss	63197	
H-5523	12/ 3/24	Letter, Dorsey to F. G. Smith	63198	15273
H-5524	12/26/24	Letter, Dorsey to F. G. Smith	63202	15277

Exhibit Number	Date	Description	Original	Print
H-5525	9/ 9/19	Copy of Howard patent 1,315,668	23587	10801
H-5526	10/12/23	Letter, F. G. Smith to Dorsey	63204	15279
	9/—/23	Letter by W. J. Belknap	63205	15281
H-5527	1/27/31	Copy of Woods and Gray patent 1,790,397	23597	10820
C-5530	10/24/32	Memo by Dorsey	63206	15281
C-5531	12/22/32	Letter, Howson to Dorsey	63216	15283
C-5532	12/22/32	Letter, Howson & Howson to Corning Glass Works	63217	15289
		Photographs of Corning Ribbon Machine		
C-5533	Undated		63224	15294
C-5534	Undated		63225	15295
C-5535	Undated		63226	15296
C-5536	Undated		63227	15297
C-5537	Undated		63228	15298
C-5538	Undated		63229	
C-5539	Undated		63230	
C-5540	Undated		63231	15299
C-5541	Undated		63232	
C-5542	Undated		63233	
H-5543	.....	Docket index of Interference 39,376	46239	11631
H-5544	.....	Docket index of Interference 43,442	46256	11647
H-5545	.....	Docket index of Interference 46,677	46263	11653
H-5546	.....	Docket index of Interference 44,251	46270	11660
H-5548	1/ 2/24	Letter, Dorsey to F. G. Smith	63234	15300
H-5549	2/ 9/24	Letter, Dorsey to Bartlett	63235	
H-5550	2/20/24	Letter, Dorsey to Bartlett	63237	15301
H-5551	3/10/24	Letter, Brown to Dorsey	63238	15303
H-5552	11/21/41	Docket index of Interference 48,326	46278	11667
H-5553	12/18/23	Letter, Honiss to Dorsey	63242	15305
H-5554	12/22/23	Letter, Honiss to Dorsey	63243	
H-5555	5/ 3/24	Letter, F. G. Smith to Byrnes	63245	
H-5556	5/ 8/24	Letter, Honiss to Dorsey	63246	
H-5557	5/21/24	Letter, Dorsey to Honiss	63247	
H-5558	5/24/24	Letter, Byrnes to Dorsey	63251	
H-5559	5/26/24	Letter, F. G. Smith to Dorsey	63254	
H-5560	10/31/24	Letter, Dorsey to Byrnes	63258	
		Docket indexes of interferences		
H-5561	.....	Interference 39,374	46285	11674
H-5562	.....	Interference 39,375	46291	

Docket indexes of interferences (Cont.)

Exhibit Number	Date	Description	Original	Print
H-5563	.....	Interference 39,377	46293	11680
H-5564	.....	Interference 39,378	46297	
H-5565	.....	Interference 39,379	46303	
H-5566	.....	Interference 39,428	46307	11684
H-5567	.....	Interference 39,429	46312	11688
H-5568	.....	Interference 40,122	46317	11693
H-5569	.....	Interference 40,515	46320	
H-5570	.....	Interference 40,663	46324	
H-5571	.....	Interference 40,664	46328	
H-5572	.....	Interference 40,665	46332	11695
H-5573	.....	Interference 40,666	46337	
H-5574	.....	Interference 42,001	46340	11699
H-5575	.....	Interference 42,765	46344	
H-5576	.....	Interference 43,462	46347	
H-5577	.....	Interference 44,608	46351	
H-5578	.....	Interference 44,609	46353	
H-5579	.....	Interference 44,610	46356	
H-5580	.....	Interference 44,780	46359	11703
H-5581	.....	Interference 45,287	46364	11708
H-5582	.....	Interference 45,288	46369	
H-5583	.....	Interference 47,297	46372	11713
H-5584	.....	Interference 48,197	46377	
H-5585	.....	Interference 48,198	46382	
H-5586	.....	Interference 48,199	46387	
H-5587	.....	Interference 48,200	46391	11718
H-5588	.....	Interference 48,225	46395	
H-5589	.....	Interference 48,265	46398	
H-5590	.....	Interference 48,266	46401	11723
H-5591	.....	Interference 48,267	46404	11725
H-5592	.....	Interference 48,327	46409	11730
H-5593	.....	Interference 48,328	46416	11737
H-5594	.....	Interference 48,329	46422	11743
H-5595	.....	Interference 48,330	46428	11749
H-5596	.....	Interference 48,331	46433	11754
H-5597	.....	Interference 48,413	46437	11758
H-5598	.....	Interference 48,414	46440	11761
H-5599	.....	Interference 48,415	46443	11764
H-5600	.....	Interference 48,416	46448	11769
H-5601	.....	Interference 48,447	46451	11772
H-5602	.....	Interference 48,749	46457	
H-5603	.....	Interference 49,069	46461	11778
H-5604	.....	Interference 49,822	46465	
H-5605	.....	Interference 50,236	46468	
H-5606	.....	Interference 50,632	46471	
H-5607	.....	Interference 50,772	46475	11782
H-5608	.....	Interference 50,773	46478	11785
H-5609	.....	Interference 50,774	46481	11788

Docket indexes of interferences (Cont.)

Exhibit Number	Date	Description	Original	Print
H-5610	.....	Interference 50,782.....	46484	11791
H-5611	.....	Interference 50,783.....	46488	
H-5612	.....	Interference 50,784.....	46493	
H-5613	.....	Interference 50,785.....	46497	
H-5614	.....	Interference 50,890.....	46501	11795
H-5615	.....	Interference 50,891.....	46506	11800
H-5616	.....	Interference 50,892.....	46511	
H-5617	.....	Interference 50,893.....	46515	11805
H-5618	.....	Interference 50,894.....	46518	
H-5619	.....	Intreference 50,895.....	46521	11808
H-5620	.....	Interference 50,926.....	46525	
H-5621	.....	Interference 51,313.....	46528	11812
H-5622	.....	Interference 51,314.....	46533	11817
H-5623	.....	Interference 51,578.....	46539	
H-5624	.....	Interference 51,876.....	46543	
H-5625	.....	Interference 52,072.....	46546	
H-5626	.....	Interference 52,257.....	46549	11823
H-5627	.....	Interference 52,258.....	46552	11826
H-5628	.....	Interference 52,259.....	46555	11829
H-5629	.....	Interference 52,260.....	46558	11832
H-5630	.....	Interference 52,338.....	46561	
H-5631	5/10/23	Letter, Ewing to Bartlett.....	63263	15308A
H-5632	12/22/23	Petition for appeal and Assignment of Errors in Hartford-Fairmont Co. v. U. S. Glass Co. et al.....	63264	15309
H-5633	5/29/23	Letter, Dorsey to Bartlett.....	63267	15311
H-5634A	Undated	Book—Instructions for Hartford I. S. Machine.....	55238	
H-5634B	Undated	Book—Instructions for Hartford I. S. Machine.....	55364	
H-5635	various	Copies of Hartford-Empire bulletins for licensees.....	55504	
H-5636	11/27/41	Memo by Hunter—improvements to licensed feeders.....	63269	15312
H-5637	Undated	List of Hartford instruction books and manuals distributed to licensees.....	63272	15314
H-5638	8/ -/38	Published article—"Short Methods for Chemical Analysis of Glass" by Webster and Lyle.....	63276	
H-5639	3/13/36	Memo, Hunter to Eldred.....	63284	15317
H-5640	Undated	Hartford-Empire Field Service Report, Form 151A (See Ex. H-5723).....	63293	
H-5641	12/ 5/34	Letter, Hunter to Fairmount Glass Works.....	63295	

Exhibit Number	Date	Description	Original	Print
H-5642	10/31/41	Chart—"H-E Co. Licensee Service Organization"	63305	
H-5643	Undated	Hartford-Empire Manual—"Production Loss Analysis," etc.	55809	
H-5644	Undated	Example of Hartford-Empire manufacturing cost analyses for licensees	55872	
H-5645	11/ 6/41	Example of production reports of Hartford-Empire licensees	63306	15320
H-5646	Undated	Example of preliminary monthly reports by Hartford-Empire Co. to its licensees	63307	15321
H-5647	Undated	Example of final reports by Hartford-Empire Co. to its licensees.	63308	15322
H-5648	Undated	Typical glass company performance chart	63309	15323
H-5649	Undated	Pamphlet—"Reference Manual for Hartford-Empire Production Reports"	63313	15327
H-5650	10/10/40	Document entitled "Minimum Investment Study, Two Feeder Plant"	63341	
C-5651	Undated	Extract from the will of Alanson B. Houghton	63357	15355
C-5652	Undated	Schedule of ownership of Hartford-Empire stock formerly owned by Empire Machine Co.	63358	15355
C-5653	1/ 8/41	Order of Maine Supreme Judicial Court dissolving Empire Machine Co.	63360	15357
C-5654	Undated	Schedule of certain stockholdings in Corning Glass Works and Empire Machine Co.	63362	15359
C-5655	Undated	Photograph of Empire Machine Co.'s Type E Machine	63363	
C-5656	Undated	Schedule of bulbs manufactured by Corning Glass Works	63364	15360
C-5657	Undated	Photograph of Empire Machine Co.'s Type F Machine	63365	
C-5658	Undated	Photograph of Empire Machine Co.'s Type F Machine	63366	15360A
C-5659	6/26/19	Letter, Falck to Dorsey	63367	15361
C-5660	8/26/19	Letter, Flack to A. A. and A. B. Houghton	63369	15362
C-5661	9/ 8/19	Letter, F. G. Smith to Falck	63377	15366A
C-5662	9/16/19	Letter, Falck to F. G. Smith	63379	15367
C-5663	10/10/19	Memo by A. A. Houghton	63385	15369

Exhibit Number	Date	Description	Original	Print
C-5664	3/12/20	Letter, Falck to F. G. Smith.....	63387	15371
C-5665	3/22/20	Letter, Falck to Dorsey.....	63390	15372
C-5666	5/ 1/20	Report, Gray to Falck.....	63394	15374
C-5667	1922	Copy of U. S. Census report on glass manufacture, 1921.....	63397	15378
C-5668	1940	Copy of U. S. Census report on glass manufacture, 1939.....	63408	15389
C-5669	Undated	Photograph of Westlake Machine.	63429	15410
C-5670	Undated	Photograph of Westlake Machine.	63430	15411
C-5671	Undated	Section of thermometer tubing (physical).....		
C-5672	Undated	X-Ray shield (physical).....		
C-5673	Undated	Glass dish (physical).....		
C-5674	Undated	Glass dish (physical).....		
C-5675	Undated	Photograph—pouring molten iron into glass dish.....	63431	15412
HA-5676	Undated	Model of Hazel-Atlas AC forming machine (physical).....		
HA-5677	Undated	Model of Hazel-Atlas feeder (physical).....		
HA-5678	Undated	List—"Hazel-Atlas plunger feeder patents".....	23649	10881
HA-5679	Undated	List—"Hazel-Atlas forming machine patents".....	23651	10882
H-5680	various	Volume of Lorenz patents, with index.....	52936	12028
H-5682	?	Copy of Cox patent 1,385,428....	23654	
H-5683	11/14/21	Memo by F. G. Smith.....	63432	
H-5684	Undated	Diagram—Headley & Thompson application Serial No. 57,800½ (patent No. 1,948,218).....	63433	15413
H-5685	Undated	Diagram—Headley & Thompson application Serial No. 60744 (patent No. 1,948,219).....	63434	15414
H-5686	2/ 7/28	Copy of O'Neill patent 1,658,735.	23684	
H-5687	5/23/33	Copy of Ingle patent 1,911,119...	23718	
H-5688	Undated	Photograph of Knox-O'Neill Model 60 Machine.....	63435	
H-5689	3/ 5/35	Copy of O'Neill patent 1,992,963.	23766	
H-5690	3/12/29	Copy of Soubier patent 1,705,341.	23794	
H-5691	4/25/33	Copy of O'Neill patent 1,906,086.	23826	
H-5692	Undated	Photograph of Lynch No. 10 narrowneck bottle machine.....	63436	15415
H-5693	2/10/31	Copy of Badger patent 1,792,267.	23832	
H-5694	various	Papers from Interference 55,728..	46564	
H-5693A	various	Additional papers from Interference 55,728.....	46751	

Exhibit Number	Date	Description	Original	Print
H-5693B	various	Additional papers from Interference 55,728	47158	
H-5695	various	Papers from Interference 62,766	47646	
H-5696	various	File wrapper and contents of application for O'Neill patent 1,992,963	48065	
H-5697	3/24/31	Letter, F. G. Smith to Tips	63437	
H-5698	7/ 9/31	Letter, Champeau to Tips	63438	
H-5699	9/ 9/31	Letter, Tips to F. G. Smith	63441	
H-5700	9/14/31	Telegram, F. G. Smith to Tips	63442	15415
H-5701	9/15/31	Audit report, Main & Co. to Tips	63443	
H-5702	2/23/32	Telegram, F. G. Smith to Tips	63448	
H-5703	5/13/32	Telegram, F. G. Smith to Tips	63449	
H-5704	6/25/32	Telegram, F. G. Smith to Tips	63450	
H-5705	7/25/32	Letter, Safford to Three Rivers Glass Co	63451	
H-5706	10/21/32	Letter, Searcy to Safford	63452	
H-5707	11/ 1/32	Letter, Tips to Creditors of Three Rivers Glass Co	63453	
H-5708	5/16/33	Letter, Hobson to Searcy	63454	15417
H-5709	5/24/33	Memo, F. G. Smith to Hobson	63457	
H-5710	5/25/33	Letter, Hobson to Searcy	63458	
H-5711	6/16/33	Letter, Safford to Searcy	63460	
H-5712	2/ 2/34	Letter, Safford to Searcy	63461	
H-5713	6/21/33	Contract — Supplemental Agreement between Hartford-Empire Co. and Receiver for Three Rivers Glass Co	19905	
H-5714	6/21/33	Court order approving Ex. H-5713	19910	
H-5715	7/17/34	Letter, Searcy to Safford	63463	
H-5716	8/ 6/34	Telegram, Safford to Coquat	63464	
H-5717	8/15/34	Letter, Tips to F. G. Smith	63465	
H-5718	8/24/34	Letter, Hobson to Searcy	63467	
H-5719	9/ 1/34	Letter, Searcy to Safford	63468	15419
H-5720	9/19/34	Letter, Searcy to Safford	63470	15421
H-5721	10/ 8/34	Letter, Tips to F. G. Smith	63471	
H-5722	10/ 9/34	Letter, Safford to Coquat	63472	
H-5723	11/ 5/34	Hartford-Empire field service report, Form 151 (See Ex. H-5640)	63475	
H-5724	10/13/34	Letter, F. G. Smith to Tips	63477	
H-5725	10/13/34	Letter, Searcy to Safford	63479	
H-5726	10/18/34	Letter, Searcy to Safford	63481	15422
H-5727	6/ 8/35	Letter, Searcy to Safford	63483	
H-5728	6/14/35	Letter, Searcy to Safford	63484	
H-5729	7/19/35	Letter, Safford to Searcy	63486	
H-5730	7/23/35	Letter, Searcy to Safford	63489	

Exhibit Number	Date	Description	Original	Print
H-5731	9/21/35	Letter, Kelly to Hartford-Empire Co.	63491	
H-5732	10/ 4/35	Letter, Searcy to Safford	63492	
H-5733	12/14/35	Letter, Chamberlain to Safford	63493	
H-5734	1/ 7/36	Letter, Chamberlain to Hartford-Empire Co.	63495	
H-5735	1/ 7/36	Telegram, Hartford-Empire Co. to Searcy	63496	
H-5736	3/ 9/36	Memo, Safford to F. G. Smith	63497	
H-5737	4/22/36	Letter, Safford to Searcy	63499	
H-5738	5/ 5/36	Telegram, Searcy to Safford	63502	
H-5739	7/28/36	Letter, Searcy to Safford	63503	
H-5740	9/ 5/36	Letter, Searcy to Safford	63504	
H-5741	9/15/36	Letter, Searcy to Safford	63506	15424
H-5742	9/17/36	Letter, Safford to Searcy	63508	15427
H-5743	9/12/36	Letter, Church to Creditors of Receiver of Three Rivers Glass Co.	63510	15428
H-5744	10/10/36	Letter, Safford to Searcy	63513	
H-5745	11/16/36	Letter, Searcy to Safford	63514	15432A
H-5746	11/—/36	Notice of hearing, Chamberlain, Receiver to all parties interested in suit of Live Oak Gas Co. v. Three Rivers Glass Co.	63516	
H-5747	12/ 4/36	Letter, Searcy to Safford, with copy of court order	63518	15433C
H-5748	12/ 4/36	Letter, Frost National Bank to Safford	63521	
H-5749	Undated	Chart of Hartford-Empire licensed machines, 1916–1941	63522	15435
H-5750	Undated	Chart of Hartford-Empire contract relations with its licensees	63523	15436
H-5751	10/31/33	Contract—typical Hartford-Empire Former License covering Lynch No. 10 Machine	19912	9636A
H-5752	10/ 2/41	Letter, Hartford-Empire Co. to its licensees	19922	9639
		Supplemental Agreements and Licenses of 1941 between Hartford-Empire Co. and Licensees		
H-5754	3/31/41	Hartford-Empire Co. and Akro-Agate Co.	19934	9640
H-5755	3/25/41	Hartford-Empire Co. and Armstrong Cork Co.	19932	9640
H-5756	3/ 5/41	Hartford-Empire Co. and Bartlett-Collins Co.	19941	9641

Supplemental Agreements and Licenses, etc. (Cont.)

Exhibit Number	Date	Description	Original	Print
H-5757	3/15/41	Hartford-Empire Co. and Brockway Glass Co.	19950	9641
H-5758	2/28/41	Hartford-Empire Co. and Carr-Lowrey Glass Co.	19957	9641
H-5759	3/ 7/41	Hartford-Empire Co. and Chattanooga Glass Co.	19967	9641
H-5761	3/17/41	Hartford-Empire Co. and Fairmount Glass Works	19975	9642
H-5762	3/ 1/41	Hartford-Empire Co. and Florida Glass Mfg. Co.	19983	9642
H-5763	2/27/41	Hartford-Empire Co. and Foster-Forbes Glass Co.	19990	9642
H-5764	4/ 7/41	Hartford-Empire Co. and Gayner Glass Works	19997	9642
H-5765	3/13/41	Hartford-Empire Co. and Glass Containers, Inc.	20004	9643
H-5766	2/27/41	Hartford-Empire Co. and J. T. & A. Hamilton Co.	20011	9643
H-5767	4/29/41	Hartford-Empire Co. and Indiana Glass Co.	20020	9643
H-5768	2/28/41	Hartford-Empire Co. and Kimble Glass Co.	20028	9643
H-5769	3/10/41	Hartford-Empire Co. and Knox Glass Bottle Co.	20036	9644
H-5770	4/ 4/41	Hartford-Empire Co. and Laurens Glass Works, Inc.	20046	9644
H-5771	3/25/41	Hartford-Empire Co. and Libbey Glass Co.	20054	9644
H-5772	3/17/41	Hartford-Empire Co. and Liberty Glass Co.	20063	9644
H-5773	3/ 6/41	Hartford-Empire Co. and Maywood Glass Co.	20072	9645
H-5774	3/21/41	Hartford-Empire Co. and Northwestern Glass Co.	20081	9645
H-5775	4/ 2/41	Hartford-Empire Co. and Pierce Glass Co.	20089	9645
H-5776	3/ 3/41	Hartford-Empire Co. and Pittsburgh-Corning Corp.	20097	9645
H-5777	4/19/41	Hartford-Empire Co. and Warfield Co. (Sterling Glass Division)	20105	9646
H-5778	3/18/41	Hartford-Empire Co. and Swindell Bros., Inc.	20114	9646
H-5779	4/ 4/41	Hartford-Empire Co. and Universal Glass Products Co.	20123	9646
H-5780	3/ 7/41	Hartford-Empire Co. and T. C. Wheaton Co.	20130	9646

Agreements and Licenses, etc. (Cont.)

Exhibit Number	Supplemental Data	Description	Original	Print
H-5781	Undated	Hartford-Empire Co. and Anchor Hocking Glass Corp. (executed by Hartford-Empire Co. only).	20139	9647
H-5782	3/31/41	License and Lease No. HSF-453, Hartford-Empire Co. to Anchor Hocking Glass Corp. of Pa.....	20152	9655
H-5783	Undated	Hartford-Empire Co. and Buck Glass Co. (executed by Hartford-Empire Co. only).....	20178	9673
H-5784	Undated	Hartford-Empire Co. and Glenshaw Glass Co., Inc. (executed by Hartford-Empire Co. only).	20187	9673
H-5785	Undated	Hartford-Empire Co. and Lamb Glass Co. (executed by Hartford-Empire Co. only).....	20196	9673
H-5786	Undated	Hartford-Empire Co. and Latchford-Marble Glass Co. (executed by Hartford-Empire Co. only).....	20203	9673
H-5787	4/29/41	License and Lease No. HSF-461, Hartford-Empire Co. to Latchford-Marble Glass Co.....	20212	9674
H-5788	Undated	Hartford-Empire Co. and McKee Glass Co. (executed by Hartford-Empire Co. only).....	20238	9674
H-5789	Undated	Hartford-Empire Co. and Olean Glass Co. (executed by Hartford-Empire Co. only).....	20246	9674
H-5790	Undated	Hartford-Empire Co. and Thatcher Mfg. Co. (executed by Hartford-Empire Co. only)....	20255	9675
H-5791	Undated	Hartford-Empire Co. and Tygart Valley Glass Co. (executed by Hartford-Empire Co. only)....	20263	9675
H-5792	10/ 1/37	License and Lease No. HIS-66, Hartford-Empire Co. to Maryland Glass Corp.....	20270	
H-5793	8/ -/41	Form of Hartford-Empire Single Feeder license and lease now in use.....	20303	9675
H-5794	7/ -/41	Form of Hartford-Empire I. S. Machine license and lease now in use.....	20329	
H-5795	8/ -/41	Form of Hartford-Empire Lehr license and lease, now in use...	20353	9675
H-5796	10/ -/41	Form of Hartford-Empire Lehr Stacker license and lease now in use.....	20375	

Exhibit Number	Date	Description	Original	Print
H-5797	4/ -/38	Form of Hartford-Empire Conveyor license and lease now in use	20379	
H-5798	6/ -/41	Form of Hartford-Empire Batch Feeding System license and lease now in use	20383	
H-5799	9/ 1/41	Schedule of Hartford - Empire feeder royalties now in use	63538	15451
H-5800	Undated	Schedule of Hartford - Empire equipment	63539	15452
H-5801	12/10/41	Schedule of Hartford - Empire standard license fees and costs of active equipment	63541	15454
H-5802	12/11/41	Schedule of Hartford-Empire license fees and cost of inactive equipment	63542	15454
H-5803	Undated	Analysis of Hartford-Empire financial statements, 1912-1937	63543	15455
H-5803A	Undated	Analysis of Hartford-Empire financial statements, 1938-1939	63544	15456
H-5804	Undated	Chart 1, Glass container production and shipments, 1929-1937.	63545	15457
H-5805	Undated	Chart 2, Glass container production and shipments, 1929-1937.	63546	15458
H-5806	Undated	Chart 3, Glass container production and shipments, 1929-1937.	63547	15459
H-5807	Undated	Chart 4, Index of glass container sales	63548	15460
H-5808	Undated	Chart 5, Index of glass container sales	63549	15461
H-5809	Undated	Chart 6A, Index of glass container sales	63550	15462
H-5811	Undated	Chart 6C, Annual net profit of Diamond Glass Co., 1934-1941.	63551	15463
H-5812	Undated	Chart 6D, Index of glass container sales	73552	15464
H-5813	Undated	Chart 7, Index of glass container sales	63553	15465
H-5814	Undated	Chart 8, Index of glass container sales	63554	15466
H-5815	Undated	Chart 9, Index of glass container sales	63555	15467
H-5816	Undated	Chart 10, Total glass container shipments	63556	15468
H-5817	Undated	Chart 11, Share of total glass container market represented by shipments of small and large companies	63557	15469

Exhibit Number	Date	Description	Original	Print
H-5818	Undated	Chart 12, Share of total glass container market represented by shipments of small and large companies	63558	15479
H-5819	Undated	Chart 13, share of total glass container market represented by shipments of small and large companies	63559	15480
H-5820	Undated	Chart 14, Share of total glass container market represented by shipments of small and large companies	63560	15472
H-5821	Undated	Chart 15, Share of total glass container market represented by shipments of small and large companies	63561	15473
H-5822	Undated	Chart 16, Share of total glass container market represented by shipments of small and large companies	63562	15474
H-5823	Undated	Chart 17A, Comparison of glass and paper milk container production, 1935–1939	63563	15475
H-5824	Undated	Chart 17B, Comparison of glass and paper milk container production, 1935–1939	63564	15476
H-5825	Undated	Chart 24, Index of glass container prices and all wholesale prices	63565	15477
H-5826	Undated	Chart 25, Index of glass container prices and all manufactured goods	63566	15478
H-5827	Undated	Memo by Epstein—List of 47 companies composing sample of industrial corporations	63567	15479
H-5828	Undated	Work sheet entitled "47 company series", etc	63568	
H-5834	Undated	Chart 26, Price index for different types of glass containers	63569	15480
H-5835	1/13/23	Letter, Dorsey to Falck	63570	15481
H-5836	Undated	Excerpt from brief in Interference 48,326 (pages 112–114)	48186	11835A
H-5837	12/30/22	Letter, Ashcraft to F. G. Smith	63574	
H-5838	5/26/23	Letter, Dorsey to Falck	63577	
H-5839	5/31/23	Letter, Falck to Dorsey	63580	
H-5840	6/ 7/23	Letter, H. K. Smith to Dorsey	63581	
H-5841	6/ 4/23	Memo by H. K. Smith	63582	15485
H-5842	5/ 5/23	Letter, Dorsey to F. G. Smith	63590	

Exhibit Number	Date	Description	Original	Print
H-5843	6/ 8/23	Letter, F. G. Smith to Dorsey....	63592	15491
H-5844	1/21/24	Letter, Dorsey to F. G. Smith....	63593	15492
H-5845	2/ 7/24	Letter, C. B. Belknap to Dorsey..	63595	15494
H-5846	10/19/23) 1/19/24) 1/30/24) 2/ 4/24) 3/27/24)	Drafts of contract between Owens Bottle Co. et al. and Hartford-Empire Co.....	20387	
H-5847	2/20/24	Letter, Dorsey to Honiss.....	63597	15496
H-5848	Undated	Brief for plaintiff in Hartford-Fairmont Co. v. U. S. Glass Co..	55945	12171
H-5849A	9/28/22	Letter, Dorsey to F. G. Smith....	63598	15497
H-5849B	9/28/22	Memo by Dorsey.....	63606	15505
H-5850	5/28/24	Letter, Ashcraft to F. G. Smith..	63608	
H-5851	6/ 2/24	Letter, F. G. Smith to Ashcraft..	63609	15507
H-5852	6/ 2/24	Telegram, F. G. Smith to Dorsey.	63611	
H-5853	6/ 2/24	Letter, F. G. Smith to Dorsey....	63612	
H-5854	6/ 3/24	Letter, F. G. Smith to Dorsey....	63613	
H-5855	10/15/24	Telegram, F. G. Smith to Dorsey.	63614	
H-5856A	10/16/24	Letter, F. G. Smith to Dorsey....	63616	15509
H-5856B	10/ –/24	Memo, unsigned.....	63618	15511
H-5857	10/16/24	Letter, F. G. Smith to Falck.....	63619	
H-5858	10/20/24	Letter, Dorsey to F. G. Smith....	63624	
H-5859	10/22/24	Telegram, F. G. Smith to Baker..	63627	
H-5860	11/ 6/24	Letter, Dorsey to F. G. Smith....	63628	
H-5861	9/26/25	Letter, V. A. Dorsey to V. M. Dorsey.....	63630	15512
H-5862	2/28/24	Letter, Dorsey to Honiss.....	63631	15513
H-5863	1/13/25	Letter, Dorsey to F. G. Smith....	63632	15514
H-5864	4/ 5/16	Letter, Dorsey to Canfield.....	63635	
H-5865	6/26/22	Feeder catalog, Miller Glass Engineering Co.....	63638	15517
C-5866	11/18/41	Copy of Gray patent 2,263,126...	23872	
C-5867	11/18/41	Copy of Gray patent 2,263,127...	23908	
C-5868	1/22/35	Copy of Smith patent, Reissue 19,439.....	23914	10885
H-5869	8/11/33	Telegram, Parham to Peiler.....	63642	
H-5870	8/11/33	Telegram, Parham to Peiler.....	63643	
H-5871	8/12/33	Telegram, Peiler to Parham.....	63644	
H-5873	2/ 2/22	Letter, Peiler to Bartlett.....	63645	15521
H-5874	2/ 2/22	Memo, "Shaping claims of Howard application," etc.....	63646	15521
H-5875	6/12/22	Letter, F. G. Smith to Monongah Glass Co.....	63648	15523
H-5876	6/ 4/25	Memo, Brown to F. G. Smith....	63650	15524
H-5877	8/14/25	Contract between Tucker, Reeves & Beatty and Hartford-Empire Co. as to historical data.....	20451	9688

Exhibit Number	Date	Description	Original	Print
H-5878	7/29/25	Affidavit of William J. Miller	63655	15527
H-5879	7/25/25	Letter, Brown to C. M. Clarke	63668	15535
H-5880	7/30/25	Arbitrator's report in Interferences 48,326, etc.	63671	15536
H-5881	10/ 5/27	Memo, Brown to Eldred	63677	15542
H-5882	1/19/25	Memo by Brown	63678	15543
H-5883	8/15/31	Letter, Brown to I. J. Collins	63681	15546
H-5884	various	List and copies of patents acquired by Hartford-Empire Co. from Nivison-Weiskopf Co.	23930	10901
H-5885	7/ 5/27	Telegram, Brown to Parham	63683	
H-5886	3/14/32	Memo by Parham	63685	15547
H-5887	5/ 2/32	Memo by Parham and Hobson	63697	15552
H-5888	2/20/33	Letter, F. G. Smith to Tatum	63751	15589
H-5889	3/ 2/33	Letter, Tatum to F. G. Smith	63753	15590A
H-5890	4/10/33	Letter, F. G. Smith to Tatum	63754	15591
H-5891	4/13/33	Letter, Tatum to F. G. Smith	63755	15592A
H-5892	6/ 3/31	Letter, Tatum to F. G. Smith	63756	
H-5893	8/ 5/41	Letter, Seeley to Brown	63758	15592B
H-5894	8/ 6/41	Letter, Brown to Seeley	63759	
H-5895	8/21/41	Letter, Seeley to Brown	63760	
H-5896	8/25/41	Letter, Brown to Seeley	63761	15593
H-5897	9/ –/32	Memo, unsigned	63762	15593
H-5898	10/21/32	Letter, Eldred to Warren	63765	15595
H-5899	1/26/33	Letter, McCallister to Brown	63770	
H-5900	2/ 1/33	Letter, Brown to W. J. Belknap	63772	
H-5901	2/ 2/33	Letter, Brown to Warren	63773	
H-5902	2/22/33	Letter, W. J. Belknap to Brown	63775	
H-5903	12/ 3/35	Memo, Parham to F. G. Smith	63776	15599
H-5904	12/ 3/35	Letter, Parham to Underwood	63777	15600
H-5905	6/15/36	Memo, Parham to F. G. Smith	63778	15600
H-5906	5/31/34	Telegram, Bethel to Hartford-Empire Co.	63780	15602A
H-5907	6/ 1/34	Telegram, Brown to Bethel	63781	15602B
H-5908	6/ 2/34	Letter, Bethel to Brown	63782	15602C
H-5909	6/27/34	Letter, Bethel to Brown	63783	15602D
H-5910	8/14/34	Letter, Parham to Bethel	63784	15603
H-5911	8/20/34	Letter, Bethel to Parham	63787	
H-5912	various	List and copies of patents acquired by Hartford-Empire Co. from Bethel Eng. Co.	23973	10001
H-5913	1/ 5/42	Chronology of prosecution of application for Steimer patent 2,073,571	63788	15605
H-5914	1/ 5/42	Chronology of prosecution of application for Peiler patent 2,073,572	63794	15609

Exhibit Number	Date	Description	Original	Print
H-5015	1/ 5/42	List of patents applying to Hartford Single Feeders	24014	10001
H-5015A	various	Copies of patents of Hartford-Empire inventors applying to Hartford Single Feeders	24017	10002
H-5015B	various	Copies of patents acquired by Hartford-Empire Co. and applying to Hartford Single Feeders	24568	10036
H-5016	1/ 5/42	List of patents applying to Hartford I. S. Forming Machines	24843	10055
H-5016A	various	Copies of patents applying to Hartford I. S. Forming Machines	24845	
H-5017	1/ 5/42	List of patents applying to Hartford No. 28 Paste Mold Machine	25028	10055
H-5017A	various	Copies of patents applying to Hartford No. 28 Paste Mold Machine	25032	
H-5018	1/ 5/42	List of patents applying to Hartford lehrs	25155	10068
H-5018A	various	Copies of patents of Hartford-Empire inventors applying to Hartford lehrs	25161	10067
H-5018B	various	Copies of patents acquired by Hartford-Empire Co. and applying to Hartford lehrs	25598	
H-5019	1/19/42	Summary: Hartford patents applying to certain Hartford-Empire machines	25603	10097
H-5020	1/ 5/42	Lists of Hartford-Empire miscellaneous patents	25605	10097
H-5021	9/ 4/34	Assignment, Bethel to Hartford-Empire Co.	20458	
H-5022	9/ 4/34	Contract between Bethel Engineering Co. et al. and Hartford-Empire Co.	20460	9690
H-5023	various	List and copies of patents acquired by Hartford-Empire Co. from Howard	25619	10098
H-5024	various	List and copies of patents acquired by Hartford-Empire Co. from W. J. Miller	25808	10099
H-5025	various	List and copies of patents acquired by Hartford-Empire Co. from Tucker & Reeves	26130	10099

Exhibit Number	Date	Description	Original	Print
H-5926	various	List and copies of patents acquired by Hartford-Empire Co. from Steimer	26410	11000
H-5927	various	List and copies of patents acquired by Hartford-Empire Co. from Rankin	26508	11001
H-5928	various	List and copies of patents acquired by Hartford-Empire Co. from O'Neill	26580	11001
H-5929	various	List and copies of patents acquired by Hartford-Empire Co. from Tygart Valley Glass Co.	26998	11002
H-5930	various	List and copies of patents acquired by Hartford-Empire Co. from Brockway Glass Co.	27042	11002
H-5931	various	List of Hartford-Empire Co. patents on "downward suction".	27054	11003
H-5932	various	List of Hartford-Empire Co. patents on "electric feeding"	27055	11003
H-5933	various	List of Hartford-Empire Co. patents on "force feeding"	27056	11003
H-5934	†	Copy of Danner patent 1,218,598.	27057	11004
H-5935	6/ 8/22	Letter, Commissioner of Patents to Hutchinson	48189	11835D
	6/13/22	Declaration of Interference 48,414.	48191	11835F
	6/13/22	Declaration of Interference 48,330.	48193	11835H
H-5936	10/12/25	Letter, Brown to Lawrence	63799	15612
H-5937	10/14/25	Letter, Lawrence to Brown	63800	15612
O-5938	12/31/07	Assignment, Owens Bottle Machine Co. to The Owens Bottle Machine Co.	20473	9693
O-5940	12/21/03	Letter, Geddes to Libbey	63801	15613
O-5941	1/26/05	License Agreement between Toledo Glass Co. and Libbey Glass Co.	20475	9694
O-5942	Undated	Photograph of early Owens suction machine	63802	15614A
O-5943	2/25/15	License Agreement between Toledo Glass Co. and Owens Bottle Machine Co.	20479	9697
O-5944	7/ 3/22	Contract between Toledo Glass Co. and Owens Bottle Co.	20483	9699
O-5945	8/29/03	Excerpt from National Glass Budget	63803	15615
O-5946	1886	Excerpts from Directory of Glass Factories	63810	15618

Exhibit Number	Date	Description	Original	Print
O-5947	1898–1909	Excerpts from National Glass Budget	63826	15634
O-5948	12/16/03	Contract between Toledo Glass Co. and Owens Bottle Machine Co. and Baldwin and Travis	20498	9709
H-5949	3/18/33	Report, Krey to W. J. Belknap	63840	15639
H-5950	7/25/33	Report, Krey to W. J. Belknap	63863	15654
H-5951	7/24/33	Report, Krey to W. J. Belknap	63897	15678
O-5952	various	List and copies of patents covering Owens suction machines	53419	12029
O-5953	various	List and copies of patents covering Owens feeders and feeder forming machines	53682	12033
O-5954	Undated	Drawing of Owens experimental device for making bottles	63933	16005
O-5955	Undated	Photograph of second Owens experimental machine	63934	16006
O-5956	Undated	Photograph of third Owens experimental machine	63935	16007
O-5957	Undated	Photograph of fourth Owens experimental machine	63936	16008
O-5958	Undated	Chart of suction type machines built by Owens, 1905–1940	63937	16009
O-5959	Undated	Photograph of Owens A Machine	63938	16010
O-5960	Undated	Photograph of Owens AC Machine	63939	16011
O-5961	Undated	Photograph of Owens AD Machine	63940	16012
O-5962	Undated	Photograph of Owens AL Machine	63941	16013
O-5963	Undated	Photograph of Owens AN Machine	63942	16014
O-5964	Undated	Photograph of Owens AR Machine	63943	16015
O-5965	Undated	Photograph of Owens AV Machine	63944	16016
O-5966	Undated	Photograph of Owens AT Machine	63945	16017
O-5967	Undated	Photograph of Owens ARC Machine	63946	16018
O-5968	Undated	Photograph of Owens CA Machine	63947	16019
O-5969	Undated	Photograph of Graham experimental machine	63948	16020
O-5970	Undated	Photograph of Owens AW Machine	63949	16021
O-5971	Undated	Chart of Owens flow machine and flow feeder developments	63950	16022
O-5972	Undated	Photograph of Owens AX Machine	63951	16023
O-5973	Undated	Photograph of Owens X-292 feeder	63952	16024
O-5974	Undated	Photograph of Owens AZ Machine	63953	16025
O-5975	Undated	Photograph of Owens AY-6 Machine	63954	16026
O-5976	Undated	Photograph of Owens Brookfield device	63955	16027

Exhibit Number	Date	Description	Original	Print
O-5977	4/17/25	Letter, LaFrance and Cochrane to Boshart	63956	
O-5978	Undated	Photograph of Owens Lott device	63957	16028
O-5979	11/ 6/23	Report by Cramer on Lott device	63958	16029
O-5980	4/ 7/06	Copy of Brookfield patent 883,779	27070	11016
O-5981	9/ 9/29	Memo, "Program of Work, Engineering Department"	63965	16037
O-5982	Undated	List of improvements to Owens machines, 1927–1941	63970	16042
O-5983	Undated	Photograph of Owens AN trackless machine	63983	16052
O-5984	Undated	Typical list—development of mechanical improvements other than on Owens machines	63984	16053
O-5986	12/10/35	Photograph of Owens AO Machine	63992	16058
O-5987	Undated	Tabulation of Owens-Illinois Glass Co. mechanical engineering division cost	63993	16059
O-5988	Undated	Tabulation of property additions, 1935–1940, Owens-Illinois Glass Co. and Owens-Illinois Pacific Coast Co.	63994	16060A
O-5989	Undated	Photograph of Miller MPLS Machine	63995	
O-5990	Undated)		63996	
O-5991	Undated)	Photographs of Owens PGB press	63997	
O-5992	Undated)	for glass blocks.	63998	
O-5993	Undated)		63999	16030B
O-5994	3/ 1/05	Letter, Thatcher Mfg. Co. to Owens Bottle Machine Co.	64000	16060C
O-5995	11/ 1/04	License Agreement between Owens Bottle Machine Co. et al. and Ohio Bottle Co.	20519	9721
O-5996	11/ 1/04	License Agreement between Owens Bottle Machine Co. et al. and Northwestern Ohio Bottle Co.	20548	9733
O-5997	1/ 2/09	License Agreement between Owens Bottle Machine Co. et al. and Louis Hollweg	20575	9755
O-5998	5/20/09	Contract between Hazel-Atlas Glass Co. and Owens Bottle Machine Co.	20596	9769
O-5999	3/25/30	Memo by Carter	64001	16061
O-6000	12/27/27	Letter, W. J. Belknap to Carter	64007	16063
O-6001	10/20/28	Memo, Blair to Owens Bottle Co. directors	64014	16075

Exhibit Number	Date	Description	Original	Print
O-6002	11/ 8/23	Excerpt from Minutes of directors of Owens Bottle Co.	64016	16076
O-6003	4/ 9/21	Report by Rule	64018	16077
O-6004	10/28/09	Contract between Owens Bottle Machine Co. and Charles Boldt Co.	20599	9772A
O-6005	1/13/11	License Agreement between Owens Bottle Machine Co. et al. and Illinois Glass Co.	20601	9773
		Annual Reports of Owens Bottle Machine Co.		
O-6006	11/10/08	For year ending Sept. 30, 1908...	64020	16079
O-6007	11/ 9/09	For year ending Sept. 30, 1909...	64024	16082
O-6008	12/ 6/10	For year ending Sept. 30, 1910...	64030	16088
O-6009	11/14/11	For year ending Sept. 30, 1911...	64037	16095
O-6010	11/12/12	For year ending Sept. 30, 1912...	64045	16120
O-6011	11/11/13	For year ending Sept. 30, 1913...	64052	16110
O-6012	11/10/14	For year ending Sept. 30, 1914...	64058	16116
O-6013	11/ 9/15	For year ending Sept. 30, 1915...	64067	16125
O-6014	3/23/16	Report by Libbey to stockholders of Owens Bottle Machine Co...	64074	16133
O-6015	12/14/15	License Agreement between Homer Brooke Glass Co. and Owens Bottle Machine Co.	20612	9780
O-6016	12/14/15	License Agreement between Owens Bottle Machine Co. and Graham Glass Co.	20615	9782
O-6017	2/26/18	Letter, Owens Bottle Machine Co. to Bottle Manufacturers	64086	
O-6018	4/13/17	License Agreement between Owens Bottle Machine Co. and Coshocton Glass Co.	20619	9784
O-6019	8/ 8/22	Contract between Owens Bottle Machine Co. and Coshocton Glass Co.	20637	9797
O-6020	5/ 7/18	License Agreement between Owens Bottle Machine Co. and Glenshaw Glass Co.	20641	9799
O-6021	4/30/20	Contract between Owens Bottle Machine Co. and Glenshaw Glass Co.	20660	9812
O-6022	9/ 9/18	License Agreement between Owens Bottle Machine Co. and Turner Bros. Co.	20663	9813
O-6023	12/24/19	Contract between Owens Bottle Machine Co. and Turner Bros. Co.	20683	9826

Exhibit Number	Date	Description	Original	Print
O-6024	4/29/18	Report, Biggers to Executive Committee of Owens Bottle Machine Co.	64087	16143
O-6025	5/22/18	Report, Biggers to Executive Committee of Owens Bottle Machine Co.	64088	16143
O-6026	2/12/18	Letter, Owens Executive Committee to Arkell	64089	16144
O-6027	6/ 6/22	Bill of complaint, Owens Bottle Co. v. J. T. & A. Hamilton Co.	64096	16148
O-6028	6/ 6/22	Bill of complaint, Hazel-Atlas Glass Co. and Owens Bottle Co. v. J. T. & A. Hamilton Co.	64104	16153
O-6029	3/17/24	Excerpt from report by Biggers and Baker to Executive Committee	64112	16157
O-6030	various	Excerpts from Minutes of Executive Committee and Board of Directors of Owens Bottle Machine Co.	64113	16158
O-6031	11/ -/35	Journal voucher entry, Owens-Illinois Glass Co.	64125	16164A
O-6032	11/12/35	Letter, Church to Owens-Illinois Glass Co.	64126	16165
O-6033	11/14/35	Letter, C. B. Belknap to Church	64127	16165
O-6034	12/30/27	Contract between Illinois Glass Co. and Cupples Co.	20687	9828
O-6035	various	Group of papers relating to advertisement of Presto domestic fruit jars	64128	
O-6036	Undated	Tabulation of Owens-Illinois Glass Co. Presto fruit jar advertising and sales promotion, 1928–1941.	64196	16166
O-6037	8/22/33	Copy of Nesbitt patent 1,923,581.	27078	
O-6038	4/18/33	Copy of Nesbitt patent 1,904,983.	27083	
O-6039	12/ 1/25	Contract — General Lehr Agreement between Hartford-Empire Co. and Illinois Glass Co.	20692	
O-6040	1/ 2/26	Contract — General Lehr Agreement between Hartford-Empire Co. and Owens Bottle Co.	20719	9831
O-6041	3/21/27	Contract — Supplemental Agreement amending General Lehr Agreement between Hartford-Empire Co. and Owens Bottle Co. (Ex. O-6040)	20745	9843

Exhibit Number	Date	Description	Original	Print
O-6042	7/20/27	Contract — Supplemental Agreement amending General Lehr Agreement between Hartford-Empire Co. and Illinois Glass Co. (Ex. O-6039)	20750	9845
O-6043	6/12/30	Contract between Hartford-Empire Co. and Owens-Illinois Glass Co. for settlement of lehr interference	20755	9847
O-6044	11/12/30	Contract — Supplemental Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co. for settlement of lehr interference	20762	9852
O-6045	2/18/31	Contract—Lehr Agreement between Hartford-Empire Co. and Owens-Illinois Glass Co.	20767	9854
O-6046	2/18/31	Contract between Hartford-Empire Co. and Owens-Illinois Glass Co. relating to Dixon lehrs	20773	9856
O-6047	2/ 6/35	Contract—Lehr royalty agreement between Hartford-Empire Co. and Owens-Illinois Glass Co.	20776	9857
H-6048	7/10/33	Memo, Brown to F. G. Smith	64197	16166
H-6049	7/10/33	Telegram, Brown to Bridges	64201	16170A
H-6050	7/10/33	Letter, Brown to C. B. Belknap	64202	16170B
H-6051	7/11/33	Memo, Parham to Brown	64203	16170C
H-6052	7/17/33	Memo, Parham to F. G. Smith	64205	16171
H-6053	7/15/33	Memo, Brown to F. G. Smith	64207	16173
H-6054	7/18/33	Memo, unsigned, "Outline of proposed agreement between H. E. and L. C."	64209	16174
H-6055	7/27/33	Memo by Brown, "Lynch Deal"	64211	16176A
O-6056	4/17/23	Letter, Carter to C. B. and W. J. Belknap	64213	16177
O-6057	Undated	Report, Milans and C. B. Belknap to Owens Bottle Co.	64215	16178
O-6058	Undated	Report, Milans and C. B. Belknap to Owens Bottle Co.	64229	16184
O-6059	6/20/06	Drawing signed "Clyde R. Lott"	64271	
O-6060	2/23/24	Letter, W. J. Belknap to F. P. Davis	64272	16190A
O-6061	2/23/24	Memo by W. J. Belknap	64273	16191
O-6062	2/27/24	Letter, C. B. Belknap to W. J. Belknap	64282	16196
O-6063	Undated	Memo by Milans (See Ex. O-6062).	64285	16198
O-6064	3/ 5/24	Letter, Milans to C. B. Belknap	64291	

Exhibit Number	Date	Description	Original	Print
O-6065	3/13/24	Letter, Rector to W. J. Belknap..	64292	16202A
O-6066	3/25/24	Letter, C. B. Belknap to Milans..	64293	16202B
O-6067	3/27/24	Letter, Milans to C. B. Belknap..	64294	16203
H-6068	2/ 6/33	Letter, Parham to C. B. Belknap..	64295	
H-6069	2/22/33	Letter, C. B. Belknap to Parham..	64302	16204A
H-6070	4/13/33	Memo, Parham to C. B. Belknap..	64303	16205
H-6071	6/ 7/33	Letter, Hobson to Hoge.....	64304	16205
H-6072	6/ 8/33	Letter, Hoge to Hobson.....	64306	16206A
H-6073	6/12/33	Letter, Hoge to Hobson.....	64307	16206B
H-6074	6/14/33	Letter, Parham to Hoge.....	64308	16207
H-6075	6/28/33	Letter, Hoge to Parham.....	64310	16208A
O-6076A	1/19/24	Letter, Carter to F. P. Davis....	64311	16209
O-6076B	1/30/24	Telegram, Carter to W. J. Belknap	64313	16210A
O-6076C	1/30/24	Letter, W. J. Belknap to F. P. Davis.....	64314	16214
O-6076D	2/ 7/24	Letter, W. J. Belknap to F. P. Davis.....	64317	16212
O-6076E	2/11/24	Letter, Carter to F. P. Davis....	64318	16213
O-6076F	2/11/24	Letter, F. P. Davis to W. J. Belknap.....	64320	16214A
O-6076G	2/14/24	Letter, Carter to F. P. Davis....	64321	16215
O-6076H	2/14/24	Letter, Milans to W. J. Belknap..	64323	16217
O-6076I	2/27/24	Letter, F. P. Davis to W. J. Belknap.....	64324	16218
O-6076J	2/29/24	Letter, F. P. Davis to Carter.....	64326	16220
O-6076K	3/ 8/24	Letter, Carter to F. P. Davis.....	64329	16223
O-6076L	3/11/24	Letter, Rector to W. J. Belknap..	64331	16224A
O-6076M	3/13/24	Letter, Carter to Rector and Davis	64332	16225
O-6076N	3/20/24	Letter, F. P. Davis to W. J. Belknap.....	64333	16226
O-6076O	4/ 2/24	Letter, F. P. Davis to W. J. Belknap.....	64335	16228
O-6076P	3/26/24	Letter, Milans to W. J. Belknap..	64336	16229
O-6076Q	4/ 2/24	Letter, Carter to F. P. Davis....	64339	16233
B-6077A	Undated)		64342	16236
B-6077B	Undated)	Charts of operations of Ball glass	64343	16237
B-6077C	Undated)	furnaces, 1910–1935.	64344	16238
B-6077D	Undated)		64345	16239
B-6077E	Undated)		64346	16240
		Tabulations of Ball Bros. Co. monthly inventory, production and billings of domestic fruit jars		
B-6078	Undated	For the year 1936.....	64347	16241
B-6079	Undated	For the year 1937.....	64348	16241
B-6080	Undated	For the year 1938.....	64349	16242
B-6081	11/18/19	Copy of McCauley patent 1,322,318.....	27099	11023

Exhibit Number	Date	Description	Original	Print
GCA-6082	Undated	Chart—"Glass container industry. Total shipments compared with capacity, 1928–1939"	64350	16242A
GCA-6083	Undated	Tabulation—"Glass container industry. Total shipments compared with capacity in gross, 1928–1939"	64351	16243
GCA-6084	Undated	Chart—"Progress of companies shipping less than 200,000 gross in 1928"	64352	16244
GCA-6085	Undated	Tabulation—"Progress of companies shipping less than 200,000 gross in 1928"	64353	16245
GCA-6086	Undated	Second page of Ex. GCA-6085	64354	16246
GCA-6087	Undated	Chart—"Progress of companies shipping more than 200,000 gross but less than 1,000,000 gross in 1928"	64355	16247
GCA-6088	Undated	Tabulation—"Progress of companies shipping more than 200,000 gross but less than 1,000,000 gross in 1928"	64356	16248
GCA-6089	Undated	Chart—"Progress of companies shipping more than 1,000,000 gross in 1928"	64357	16249
GCA-6090	Undated	Tabulation — "Progress of companies shipping more than 1,000,000 gross in 1928"	64358	16250
GCA-6091	Undated	Chart—"Progress of companies grouped according to gross shipped since 1928"	64359	16251
GCA-6092	Undated	Tabulation — "Progress of companies grouped according to gross shipped since 1928"	64360	16252
B-6093	10/16/40	Letter, F. C. Ball to Warren	20788	9864A
B-6094	11/11/40	Letter, Warren to Ball Bros. Co.	64361	16253
O-6095	1/13/34	Copy of Kinker patent 1,980,343	27105	
O-6097	Undated	List of patents assigned to Owens-Illinois Glass Co. by O'Neill Machine Co.	27117	11029
O-6098	various	Copies of patents assigned to Owens-Illinois Glass Co. by O'Neill Machine Co.	27118	
H-6099	Undated	Memo and list of patent applications filed by Hartford-Empire Co. in 1927, 1928 and 1929	27488	11020

Exhibit Number	Date	Description	Original	Pr. 8
H-6100	1/12/42	List of patents in infringement suits listed in Ex. 973	27523	11041
H-6101	1/14/42	Lists of expired patents formerly owned by Hartford-Empire Co.	27529	
H-6102	1/13/42	List of Hartford-Empire patents issued between Aug. 20, 1940 and Dec. 31, 1941	27539	11045
H-6103	1/20/42	Tabulation of Hartford-Empire patents and classified lists and descriptions of those not applying to present Hartford-Empire machines	27542	11046
H-6104	1/19/42	Tabulation of patents under which Hartford-Empire Co. is or has been licensed	27592	11064
H-6105	1/19/42	Lists of patents on patent plates which have been applied on Hartford machinery	27598	11066
H-6106	1/19/42	Summary of Hartford-Empire patents	27672	11100
H-6107	8/ 2/35	Settlement Agreement between Hartford-Empire Co. and Florida Glass Mfg. Co.	20789	9865
H-6108	4/26/23	License and Lease No. Hwd. 14, Hartford-Empire Co. to Berney-Bond Glass Co.	20793	9867
H-6109	2/15/26	General Agreement between Hartford Empire Co. and Berney-Bond Glass Co.	20820	9867
H-6110	5/24/23	License and Lease No. Hwd. 26 from Hartford-Empire Co. to Pacific Coast Glass Works	20849	9871
H-6111	2/21/20	General Agreement between Hartford-Fairmont Co. and Illinois Glass Co.	20877	9872
H-6112	10/10/24	Letter, F. G. Smith to Heintselman	64362	16255
H-6113	—/—/40	Plaintiff's "Summary of Practices of Defendants and Relief Requested"	64364	16256
H-6114	8/20/40	Tabulation comparing Hartford-Empire Co.'s patents with all patents similarly classified by the Patent Office	64380	16272
H-6115	Undated	Group of Patent Office classification lists	48195	
H-6116	5/22/39	Letter by Ahrons, unaddressed	64384	16274

Exhibit Number	Date	Description	Original	Print
H-6117	8/16/39	Letter, Ryan to Mathews	64387	16276
H-6118	8/28/39	Letter, Mathews to Ryan	64389	
C-6119	Undated	Stipulation between U. S. and Corning Glass Works, Empire Machine Co. and Hartford-Empire Co. et al. re assignment of patents by Hartford-Empire Co. to Corning Glass Works	16426	8567
		File Wrapper contents of interferences		
H-6120	.....	Interference 39,374	48447	
H-6121A	.....	Interference 39,378	48574	
H-6121B	.....	Interference 39,378	48825	
H-6122	.....	Interference 39,428	49084	11836
H-6123	.....	Interference 40,515	49184	
H-6124	.....	Interference 40,663	49280	
H-6125	.....	Interference 40,664	49385	
H-6126	.....	Interference 42,601	49446	11837
H-6127	.....	Interference 42,765	49511	
H-6128	.....	Interference 44,608	49525	11843
H-6129	.....	Interference 44,609	49562	
H-6130	.....	Interference 44,610	49638	
H-6131	.....	Interference 44,780	49654	
H-6132	.....	Interference 45,288	49816	
H-6133	.....	Interference 48,200	49867	
H-6134	.....	Interference 48,225	49930	
H-6135	.....	Interference 48,266	49942	
H-6136	.....	Interference 48,413	49969	11846
H-6137	.....	Interference 48,416	49990	11849
H-6138	.....	Interference 48,749	50004	
H-6139A	.....	Interference 48,948	50074	11852
H-6139B	.....	Interference 48,948	50078	
H-6140	.....	Interference 50,236	50125	
H-6141	.....	Interference 50,772	50158	
H-6142	.....	Interference 50,773	50177	
H-6143	.....	Interference 50,774	50195	
H-6144	.....	Interference 50,784	50214	
H-6145	.....	Interference 50,893	50253	11855
H-6146	.....	Interference 50,894	50321	
H-6147	.....	Interference 50,926	50358	
H-6148	.....	Interference 53,436	50378	
H-6149	.....	Interference 56,367	50525	11857
H-6150	.....	Interference 66,913	50539	
H-6151	.....	Interference 73,379	50549	

Exhibit Number	Date	Description	Original	Print
H-6152	1/21/42	Stipulation of facts between U. S. and Hartford-Empire Co. et al. re installation and use of Hartford-Empire equipment and activities of Hartford-Empire Co.	16420	8571
H-6153	9/ 3/21	Letter, Owens Bottle Co. to Thatcher Mfg. Co.	64391	16278
H-6154	9/ 7/21	Letter, F. G. Smith to Thatcher Mfg. Co.	64392	16279

Testimony of individuals in various Hartford-Empire infringement suits, on behalf of defendants therein, and other excerpts from records in said suits

	Witness or Paper	Suit	Pages of Appeal Record		
H-6155	O. M. Tucker	H-E v. Obear-Nester Glass Co. (39 F. (2d) 709, CCA 8)	635–636	64393	
H-6156	D. L. Middendorf	H-E v. Obear-Nester Glass Co. (39 F. (2d) 709, CCA 8)	637	64396	
H-6157	G. E. Howard	H-E v. Obear-Nester Glass Co. (39 F. (2d) 709, CCA 8)	637–640	64396	
H-6158	Answer	H-E v. Kearns-Gorsuch Bottle Co. (58 F. (2d) 701, CCA 6)	Vol. I, 17–25	64403	16279
H-6159	Report of Special Master (part)	H-E v. Kearns-Gorsuch Bottle Co. (58 F. (2d) 701, CCA 6)	Vol. I, 61–66	64413	
H-6160	O. M. Tucker	H-E v. Kearns-Gorsuch Bottle Co. (58 F. (2d) 701, CCA 6)	Vol. II, 673–683	64420	16288
H-6161	O. M. Tucker	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 577–598	64432	
H-6162	W. J. Miller	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 561–576	64455	16299
H-6163	G. E. Howard	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 493–588	64472	16315
H-6164	G. E. Howard (rebuttal)	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 398–400	64519	
H-6165	F. E. Troutman	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 538–544	64522	
H-6166	C. H. Christie	H-E v. Nivison-Weiskopf Co. (58 F. (2d) 701, CCA 6)	Vol. I, 545–556	64531	
H-6167	W. J. Miller	H-E v. Hazel-Atlas Glass Co. (39 F. (2d) 111, CCA 3)	Vol. I, 486–503	64544	16361
H-6168	G. E. Howard	H-E v. Hazel-Atlas Glass Co. (39 F. (2d) 111, CCA 3)	Vol. II, 513–623	64563	16376
H-6169	Request by Hazel-Atlas counsel	H-E v. Hazel-Atlas Glass Co. (39 F. (2d) 111, CCA 3)	Vol. II, 564	64676	16470
H-6170	J. H. McNash	H-E v. Hazel-Atlas Glass Co. (39 F. (2d) 111, CCA 3)	Vol. I, 349–350	64678	16470
H-6171	K. E. Peiler	H-E v. Hazel-Atlas Glass Co. (39 F. (2d) 111, CCA 3)	Vol. I, 289–292	64681	16472

Exhibit Number	Date	Description	Original	Print
H-6172	2/ 3/42	Memo, Brown to Wall	64686	16475
O-6173	1/14/42	Contract—Amendment to general license from Owens - Illinois Glass Co. et al. to Hartford-Empire Co. (Ex. 568)	20915	9881
O-6174	1/14/42	Contract—Amendment to general license from Hartford-Empire Co. to Owens-Illinois Glass Co. (Ex. 569)	20918	9883
O-6175	1/14/42	Contract—Amendment to suction inventions license agreement between Hartford-Empire Co. and Owens-Illinois Glass Co. (Ex. 571)	20924	9887
O-6176	1/14/42	Contract—Amendment to consolidated feeder and former license and lease between Owens-Illinois Glass Co. and Hartford-Empire Co. (Ex. 578)	20927	9888
O-6177	3/14/39	Letter Agreement amending consolidated stacker and conveyor agreement between Hartford-Empire Co. and Owens-Illinois Glass Co. (Ex. 579)	20931	9891
O-6178	1/ 2/42	Letter, Williams to Philbin	64687	16476
O-6179	1/ 2/42	Waiver, Owens-Illinois Glass Co. to Hazel-Atlas Glass Co.	20933	9892
O-6180	1/ 6/42	Letter, Philbin to Williams	64688	16476
O-6181	1/16/42	Letter, Williams to Philbin	64689	16477
O-6182	1/ 9/42	Waiver, Owens - Illinois Pacific Coast Co. to Hazel-Atlas Glass Co.	20934	9890
O-6183	Undated	List of patents covering Owens AO Machine	27673	11100
O-6183A	12/24/40	Hawley et al. Patent No. 2,225,631, covering Owens AO Machine	27674	
O-6183B	12/24/40	Benoit Patent No. 2,225,898, covering Owens AO Machine	27700	
O-6183C	12/24/40	Benoit Patent No. 2,225,899, covering Owens AO Machine	27763	
O-6184	Undated	Stipulation between U. S. and Owens-Illinois Glass Co. re Owens suits and interferences	16459	8595
O-6185	1/15/42	Tabulation of stockholdings of Owens - Illinois individual defendants in other defendant companies	64690	16477

Exhibit Number	Date	Description	Original	Print
O-6186	various	Log of Owens-Illinois stationary pot experiment	56184	
O-6187	7/26/24) 1/10/25)	Excerpts from Minutes of meetings of Owens Bottle Co. Executive Committee	64691	16477
H-6188	7/--/41	Advertisement of Amsler-Morton Co. in The Glass Industry	64692	"
H-6189	3/30/40	Advertisement of Sommerfeld Machine Co. in National Glass Budget	64694	
H-6190	5/15/26	Photograph and description of W. J. Miller MAC bottle machine	64695	

Tabulations of yearly packed gross of glassware reported to Hartford-Empire Co. as manufactured on feeders licensed by it.

		Licensee		
H-6191	Undated	Buck Glass Co.	64700	16478
H-6192	Undated	Carr-Lowrey Glass Co.	64701	16480
H-6193	Undated	Chattanoog Glass Co.	64702	16481
H-6194	Undated	Diamond Glass Co.	64703	16482
H-6195	Undated	Fairmount Glass Works	64704	16483
H-6196	Undated	Florida Glass Mfg. Co.	64705	16484
H-6197	Undated	Foster-Forbes Glass Co.	64706	16485
H-6198	Undated	Gayner Glass Works	64707	16486
H-6199	Undated	Glass Containers, Inc.	64708	16487
H-6200	Undated	J. T. & A. Hamilton Co.	64709	16488
H-6201	Undated	Knox Glass Bottle Co.	64710	16489
H-6202	Undated	Lamb Glass Co.	64711	16490
H-6203	Undated	Latchford-Marble Glass Co.	64712	16491
H-6204	Undated	Laurens Glass Works	64713	16492
H-6205	Undated	Maryland Glass Corp.	64714	16493
H-6206	Undated	Maywood Glass Co.	64715	16494
H-6207	Undated	Northwestern Glass Co.	64716	16495
H-6208	Undated	Pierce Glass Co.	64717	16496
H-6209	Undated	Swindell Bros., Inc.	64718	16497
H-6210	Undated	Tygart Valley Glass Co.	64719	16498
H-6211	Undated	Universal Glass Products Co.	64720	16499
H-6212	Undated	T. C. Wheaton Co.	64721	16500

ALPHABETICAL INDEX

ALPHABETICAL INDEX

ALPHABETICAL SUBJECT INDEX

	Original	Print
Affidavits:		
Brown, Rebecca D.	673	497
Carnahan, J. W.	656	484
Champeau, T. L.	694	508
	14337	7546
Eldred, R. M.	14335	7545
Foley, Nestor F.	14671	
Fox, Paul H.	14841	
Ineks, S. S.	668	490
	14354	7557
McNash, J. H.	635	467
Shanley, J. A.	14361	7563
	14404	7591
Smith, F. Goodwin	607	451
	14334	7578
Van Cise, J. G.	14619	
Wall, S. S.	14315	7532
Answers, to Complaint:		
Anchor Hocking Glass Corporation et al.	371	274
Ball Brothers Company, et al.	320	234
Corning Glass Works, et al.	434	320
Empire Machine Company, et al.	452	335
Glass Container Association of America, Inc., et al.	192	140
Hartford Empire Company, et al.	584	435
Hazel-Atlas Glass Company, et al.	203	147
Liberty Glass Company, et al.	197	
Lynch Corporation, et al.	306	224
Owens Illinois Glass Company, et al.	231	170
Rieman, G. E.	564	
Thatcher Manufacturing Company, et al.	179	131
Answers, Supplemental:		
Ball Brothers Company	581	434
Corning Glass Works and Empire Machine Company	573	429
Hartford Empire Company	584	435
Lynch Corporation	605	450
Appeals:		
Assignment of Errors and Prayer for Reversal, on		
Ball Brothers Company, et al.	14939	7870
Collins, I. J.	15022	7900
Corning Glass Works and Empire Machine Company, et al.	14784	7808
Dilworth, Fisher & Fulton, Messrs.	15062	7913
Glass Container Association of America, Inc., et al.	14977	7883
Hartford Empire Company, et al.	14553	7708
Hazel Atlas Glass Company, et al.	14731	7778
Lynch Corporation, et al.	14803	7840
Owens Illinois Glass Company, et al.	14623	7746
Thatcher Manufacturing Company	14860	7835
Bonds for costs, and approvals, on:		
Ball Brothers Company, et al.	14960	
Collins, I. J.	15040	
Corning Glass Works, et al.	14820	

	Original	Print
Appeals—Continued		
Bonds for costs, and approvals, on—Continued		
Empire Machine Company, et al	14988	
Dilworth, Fisher & Fulton, Messrs	15079	
Glass Container Association of America, Inc., et al	14907	
Hartford Empire Company, et al	14604	
Hazel Atlas Glass Company, et al	14767	
Lynch Corporation, et al	14920	
Owens Illinois Glass Company, et al	14668	
Thatcher Manufacturing Company, et al	14877	
Citations on:		
Ball Brothers Company, et al	14987	
Collins, I. J.	15044	
Corning Glass Works and Empire Machine Company, et al	14938	
Dilworth, Fisher & Fulton, Messrs	15083	
Glass Container Association of America, Inc., et al	15004	
Hartford Empire Company, et al	14616	
Hazel Atlas Glass Company, et al	14774	
Lynch Corporation, et al	14924	
Owens Illinois Glass Company, et al	14726	
Thatcher Manufacturing Company, et al	14883	
Motion for Supersedeas and Stay, pending—and orders thereon:		
Ball Brothers Company, et al	14982	
Order	14983	7822
Collins, I. J.	15006	
Order	15042	7913
Corning Glass Works and Empire Machine Company, et al	14832	
Order	14834	7834
Dilworth, Fisher & Fulton, Messrs	15045	
Order	15081	
Glass Container Association of America, Inc., et al	15000	
Order	15001	7899
Hartford Empire Company, et al	14810	
Order	14812	7745
Hazel Atlas Glass Company, et al	14769	
Order	14770	7807
Lynch Corporation, et al	14885	
Order	14918	7888
Owens Illinois Glass Company, et al	14622	7746
Order	14670	7777
Thatcher Manufacturing Company, et al	14844	
Order	14875	7847
Orders allowing:		
Ball Brothers Company, et al	14989	7881
Collins, I. J.	15039	7913
Corning Glass Works and Empire Machine Company, et al	14818	7826
Dilworth, Fisher & Fulton, Messrs	15078	7925
Glass Container Association of America, Inc., et al	14906	7886
Hartford Empire Company, et al	14608	7745
Hazel Atlas Glass Company, et al	14766	7806
Lynch Corporation, et al	14918	7888
Owens Illinois Glass Company, et al	14667	7777
Thatcher Manufacturing Company	14875	7847

Appeals—Continued
Petitions for:
Ball Brothers Company, et al. 14966
Collins, I. J. 15008
Corning Glass Works and Empire Machine Company, et al. 14779
Dilworth, Fisher & Fulton, Messrs. 15045
Glass Container Association of America, Inc., et al. 14999
Hartford Empire Company, et al. 14543
Hazel Atlas Glass Company, et al. 14727
Lynch Corporation, et al. 14965
Owens Illinois Glass Company, et al. 14998 7746
Thatcher Manufacturing Company, et al. 14944
Proof of Service:
Ball Brothers Company, et al. 14966
Collins, I. J. 15049
Corning Glass Works and Empire Machine Company, et al. 14997, 15049
Dilworth, Fisher & Fulton, Messrs. 15049
Glass Container Association of America, Inc., et al. 15008
Hartford Empire Company, et al. 14615, 15015
Hazel Atlas Glass Company, et al. 14778
Lynch Corporation, et al. 14999
Owens Illinois Glass Company, et al. 14971
Thatcher Manufacturing Company, et al. 14999
Statement as to Jurisdiction:
Ball Brothers Company, et al. 14966
Collins, I. J. 15008
Corning Glass Works and Empire Machine Company, et al. 14778
Dilworth, Fisher & Fulton, Messrs. 15047
Glass Container Association of America, Inc., et al. 14971
Hartford Empire Company, et al. 14545
Hazel Atlas Glass Company, et al. 14729
Lynch Corporation, et al. 14967
Owens Illinois Glass Company, et al. 14969
Thatcher Manufacturing Company, et al. 14945
Statement under paragraph 2, Rule 13:
Ball Brothers Company, et al. 14966
Corning Glass Works and Empire Machine Company, et al. 14599
Glass Container Association of America, Inc., et al. 15008
Hartford Empire Company, et al. 14614
Hazel Atlas Glass Company, et al. 14772
Lynch Corporation, et al. 14968
Owens Illinois Glass Company, et al. 14973
Thatcher Manufacturing Company, et al. 14951
Applications for extension of time to file record. 64795, 64796
Application for order fixing time of hearing on motion to vacate. 14219 7191
Assignments of error and prayer for reversal, see APPEAL.
Bond of Receiver. 15008
Bonds on Appeal. See APPEAL.

	Original	Print
Bill of Particulars by Plaintiff, as to:		
Anchor Hocking Glass Corporation	107	123
Ball Brothers Company	120	99
Corning Glass Works and Empire Machine Company	174	127
Hartford Empire Company	138	95
Lynch Corporation	172	126
Owens Illinois Glass Company	158	115
Briefs: (See also Memorandum)		
Admissible Evidence		
Scope of, Plaintiff	743	535
To show validity of patents	749	538
Certificate of Clerk:		
Citation on Appeal, see APPEAL.		
Conclusions of Law:		
Final	13997	7277
Exceptions of Hazel Atlas Glass Company to	14195	7469
Objection and exceptions, to		
Corning Glass Works, et al	14271	7525
Glass Container Association of America, Inc.	14216 14516	7485 7693
Requests for and proposed,		
Anchor Hocking Glass Corporation, et al	13640	7110
Ball Brothers Company, et al	13828	7259
Corning Glass Works, et al	13616	7095
Collins, I. J., Dilworth, J. D., Fulton, T. C., Fisher, W. V.	13634	7106
Glass Container Association of America, et al	13653	7120
Hartford Empire Company, et al	13676	7140
Hazel Atlas Glass Company, et al	13662	7128
Lynch Corporation, et al	13768	7212
Owens Illinois Glass Company, et al	13789	7229
Thatcher Manufacturing Company, et al	13645	7113
United States of America	13423	6917
On Impounding Order	711	518
Objections of Hartford Empire Company to requests for	689	505
Complaint:	1	1
Docket Entries, District Court:	64774	
Exhibits, see Exhibit Index.		
Findings of Fact:		
Final	13997	7277
Exceptions of Hazel Atlas Glass Company to	14195	7469
Objection and exceptions, to		
Corning Glass Works, et al	14271	7525
Glass Container Association of America, Inc., et al	14216 14516	7693
Requests for and proposed, see CONCLUSIONS OF LAW		
Impounding Order, on	707	514
Objections of Hartford Empire Company to requests for	689	505
Judgments:		
Dismissal:		
Anchor Hocking Glass Corporation, et al	735	532
Liberty Glass Company, et al	734	

	Original	Print
Judgment—Continued		
Impounding order	713	519
Entry or order sustaining motion for	668	
Final	14480	7653
Proposed, Revised draft of	14430	7618
Notice of settlement, proposed	14130	7430
Proposed, Draft of	14123	7422
Objections of defendants to form of and relief granted by:		
Corning Glass Works	14265	7520
	14271	7525
Glass Container Association of America, Inc., et al	14210	7485
	14213	7490
Hartford Empire Company, et al	14222	7495
	14230	7510
Hazel Atlas Glass Company, et al	14198	7471
Lynch Corporation, et al	14189	7459
Owens Illinois Glass Company, et al	14191	7467
Letter, filed October 7, 1942, from S. S. Wall	14345	7551
Motions:		
Amend Findings, etc.:		
Ball Brothers Company	14529	7700
Glass Container Association of America, Inc.	14516	7693
Bill of Particulars and definite statement, for:		
Anchor Hocking Glass Corporation	115	94
Ball Brothers Company	101	72
Corning Glass Works and Empire Machine Company	125	90
Hartford Empire Company	104	74
Lynch Corporation	121	88
Owens Illinois Glass Company	111	81
Dismissal, for:		
Anchor Hocking Glass Corporation	723	526
Corning Glass Works and Empire Machine Company	729	529
Glass Container Association of America, Inc.	725	527
Liberty Glass Company	727	
Lynch Corporation	722	526
Thatcher Manufacturing Company	728	528
Impounding Order, for	624	461
Leave to argue, by Buck Glass Company	13417	6014
Rehearing on motion of Anchor Hocking Glass Corporation	732	530
Strike Evidence, to, by Anchor Hocking Glass Corporation	739	533
Supersedeas and Stay of Judgment, for, see APPEAL.		
Vacate Order Impounding certain monies, to, by Ball Brothers	14529	7700
Vacate Order Appointing Receiver, to:		
Hartford Empire Company, filed September 28, 1942	14305	7526
Hartford Empire Company, filed October 7, 1942	14321	7535
Application, with memorandum & affidavit	14312	7531
Hartford Empire Company, filed November 16, 1942	14373	7572
New trial, for:		
Lynch Corporation	14524	7696
Glass Container Association of America, Inc.	14519	7694
Memorandum of Plaintiff on necessity for Receivership	14347	7552
Memorandum of Owens Illinois Glass Co., on proposed final judgment	14274	

	Original	Print
Notice of Motions to vacate order appointing Receiver	14309	7529
	14879	7576
Notice by plaintiff of settlement of proposed final judgment	14130	7420
Objections, Hartford Empire Company to request for findings, etc.	689	505
Objections of defendants to proposed final judgment, see JUDGMENT.		
Objections and exceptions Corning Glass Works to refusal to find	14271	7525
Opinion of Court, filed August 25, 1942 (Printed in separate volume)	13851	
Orders:		
Allowing appeals, see APPEAL.		
Appointing Receiver (Printed in opinion volume)	13989	
Broaden purposes of certain exhibits, to	796	572
Extending time for filing record in Supreme Court	64752	16515
	64771	16519
Granting Supersedeas and Stay of Judgment, see APPEAL.		
Impounding payments between Hartford Empire and Hazel Atlas	712	519
Overruling,		
Amend findings, to	14522	7695
Dismiss, to		
Collins, Dilworth, Fisher & Fulton, Messrs.	735	532
Glass Container Association of America, Inc.	731	530
Lynch Corporation	730	529
Rieman and Collins	733	531
Leave to argue, for	13422	6917
New trial,		
Glass Container Association of America, Inc.	14523	7696
Lynch Corporation	14528	7699
Rehearing, for—on motion Anchor Hocking Glass Corp.	733	531
Vacate order appointing Receiver, to	14427	7611
Sustaining,		
Amend finding, to—by Ball Brothers Company	14542	7708
Dismiss, to		
Anchor Hocking Glass Corporation	731	530
Certain defendants, on plaintiff's motion	733	531
Liberty Glass Company	731	530
Use of copies of certain exhibits	64739	16503
	64761	16518
Petition for appeal, see APPEAL.		
Praecipe for transcript,		
Appellants	64741	16505
Appellee	64755	16516
Proof of service on appeal, see APPEAL.		
Stipulation, filed January 6, 1943, re exhibits	64734	16501
Stipulation, filed January 14, 1943, re exhibits	64757	16516
Stipulation re use of copies of patents, etc.	736	
Statements as to Jurisdiction, see APPEAL.		
Statements required by Supreme Court Rule 12, see APPEAL.		
Transcripts,		
Pre-Trial conferences,		
September 20, 1940	797	573
October 1, 1940	890	607
October 15, 1940	967	620

	Original	Print
Transcripts—Continued		
Pre-Trial conferences—Continued		
October 18, 1940	1065	
October 21, 1940	1094	
October 24, 1940	1104	
October 29, 1940	1108	
November 1, 1940	1113	
November 26, 1940	1119	
November 27, 1940	1142	
December 2, 1940	1168	
January 28, 1941	1180	
February 13, 1941	1189	627
Trial testimony and arguments	1221	634

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1943

Nos 727-736 [redacted] 2-11

HARTFORD-EMPIRE COMPANY, ET AL.,
Appellants,

vs.

THE UNITED STATES OF AMERICA.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF OHIO.

OPINION OF THE DISTRICT COURT.

IN THE DISTRICT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF OHIO, WESTERN DIVISION

No. 4426 Civil. Opinion of the Court

UNITED STATES OF AMERICA, Plaintiff,

vs.

HARTFORD-EMPIRE COMPANY, et al., Defendants

Filed Aug. 25 1942, C. B. Watkins, Clerk, U. S. District Court, N. D. O.

KLOEB, District Judge:

This is a civil action initiated by the Government of the United States under the anti-trust laws—sections 1, 2 and 4 of the Sherman Act, and section 3 of the Clayton Act. The complaint was filed on December 11, 1939.

Sections 1 and 2 of the Act of July 2, 1890, 26 Stat. 209, 15 U. S. C., Secs. 1 and 2, commonly referred to as the Sherman Anti-Trust Act, as amended by the Act of August 17, 1937, 50 Stat. 693, provide in part, as follows:

Sec. 1. "Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal * * *"

Sec. 2. "Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor * * *"

Section 3 of the Clayton Act, 15 U. S. C., Sec. 14, reads in part as follows:

"It shall be unlawful * * * to lease or make a sale or contract for sale of * * * machinery, * * * whether patented or unpatented, * * on the condition, agreement, or understanding that the lessee or purchaser thereof shall not use or deal in the * * * machinery * * * of a competitor or competitors of the lessor or seller, where the effect of such lease, sale, or contract for

sale or such condition, agreement, or understanding may be to substantially lessen competition or tend to create a monopoly in any line of commerce."

Section 4 of the Sherman Act reads in part as follows:

"The several district courts of the United States are invested with jurisdiction to prevent and restrain violations of this act; and it shall be the duty of the several district attorneys of the United States, in their respective districts, under the direction of the Attorney General, to institute proceedings in equity to prevent and restrain such violations. Such proceedings may be by way of petition setting forth the case and praying that such violation shall be enjoined or otherwise prohibited."

The defendants named in the complaint originally consisted of twelve corporations and one hundred and one individuals, the latter being officers, directors, or actors associated with the defendant companies in the activities complained of by the Government. Since the filing of the complaint, three of the corporations and forty of the individuals have been dismissed. A motion for summary judgment was made by the Stevenson Corporation and this was sustained before the commencement of the trial. The Anchor Hocking Corporation and the Liberty Glass Company each made motions to be dismissed upon completion of the plaintiff's testimony, and these were sustained by the court. Two of the remaining corporate defendants and the individuals associated therewith—Corning Glass Works and Thatcher Manufacturing Company—filed motions for dismissal at the close of the plaintiff's testimony, and argument upon these motions was heard by the court in the final argument of the case. These two motions, being as yet undisposed of, are hereby overruled. The forty individuals were dismissed in various ways—through the same motions for dismissal of the corporate defendants, by motion of the plaintiff at the conclusion of the case because of lack of evidence, and because of the death of some of them since the complaint was filed.

The complaint is brought against the leading concerns in the glass container industry. It charges, generally, a violation of the anti-trust laws,

"by unlawfully conspiring, monopolizing, attempting to monopolize, and by unlawfully contracting, combining, and

conspiring to restrain interstate and foreign trade and commerce, and more particularly by acquiring and maintaining monopolies of (a) patents covering the manufacture and licensing of glass-making machinery, (b) the manufacture and distribution of glass-making machinery, and (c) the manufacture, distribution, and sale of glass products, and by excluding others from the fair opportunity to engage freely and unrestrictedly in the interstate and foreign trade and commerce in said machinery and glass products." (Paragraph 34 of the complaint.)

More specifically, in paragraph 37 of the complaint, it is charged:

"Defendants herein have conspired, and are now conspiring, unlawfully to attempt to monopolize and to monopolize, and have unlawfully combined and now are combining to restrain trade, and such defendants have maintained and are now maintaining an unlawful monopoly or unlawful monopolies, and such defendants have, and now are, unlawfully restraining trade among and between the several States of the United States with respect to—

(a) Patents on automatic machinery for the production of pressed and blown glassware and glass containers;

(b) Machinery for the production of pressed and blown glassware and glass containers, and the distribution of such machinery;

(c) The manufacture and distribution of pressed and blown glassware and particularly heat-resisting glassware;

(d) The manufacture and distribution of all kinds of glass containers;

(e) The manufacture and distribution of milk bottles;

(f) The manufacture and distribution of fruit jars."

The relief prayed for requests generally that the court enjoin the illegal practices complained of, including the performance of the contracts between the various defendants, or the execution of similar agreements; that the court enjoin the holding of stock in another corporation in the industry by one corporate defendant, or an individual defendant connected with a corporate defendant; that the Hartford-Empire Company be dissolved and its patents and other properties be rearranged under several separate and independent corporations; and that such other relief be granted as may be necessary or the court deems proper.

The defendants have denied any violation of the anti-trust laws in the manner alleged in the complaint. The Hartford-Empire Company, answering generally, avers:

"These defendants deny that they, or any one or more of them, individually or with one another, or with anyone else, have intended to establish or maintain, or have established or maintained, any conspiracy or monopoly in restraint of trade or commerce, or have entered into any combination or agreement in restraint of trade or commerce, or have committed, or threaten or intend to commit, any violation of the Sherman Anti-Trust Act or the Clayton Act."

The position of the Hartford-Empire Company which, broadly, is the position of the remainder of the defendants with the exception, perhaps, of the Glass Container Association, whose situation differs from that of the other defendant corporations, is concisely set forth in the closing argument of defense counsel as follows (Record, page 11,526),

"I want to say in conclusion, again, our position is that Hartford started out to create, started out to protect by patents what it did create, and to exploit its creation by appropriate means pointed out by the law and business custom. We claim that such domination of any part of the industry, either glass machinery or glass, as Hartford ever had, was only that inherent in the patents to which we believe we were entitled. That is what we sought, and that is what we got. The situation today is that the dominating adjudicated patents are those of Hartford's own inventors."

Description of the Corporate Defendants

The defendant Hartford-Empire Company, hereinafter sometimes referred to as Hartford, is primarily a patent holding and developing company. It is a Delaware corporation, with its principal office in Hartford, Connecticut. It was organized in 1922 as the successor to the Hartford-Fairmont Company. The Hartford-Fairmont Company was organized in 1912 by a combination of interests of the Beech-Nut Packing Company, the Monongah Glass Company, and a group of Hartford engineers. In 1912, the Beech-Nut Packing Company was in need of a cheaper source of supply of glassware for its packing industry; the Monongah Glass

Company was a glass manufacturing concern and had been supplying the Beech-Nut Packing Company with glassware; and the third group, comprised of engineers and inventors, was engaged in research work on automatic machinery for the production of glassware in the city of Hartford, Connecticut. The Hartford-Empire Company does not manufacture glassware of any kind except for experimental purposes. Its income is derived chiefly from royalties and fees obtained from the licensing and leasing of its machinery. The machinery is not made by Hartford but is manufactured for it by the Hartford Special Machinery Company. The Hartford-Empire Company owns or controls substantially all of the gob feeding patents in the glass container industry.

The defendant Corning Glass Works, hereinafter referred to as Corning, is a New York corporation, with its principal office at Corning, New York. It is the successor of two other corporations that date back to 1875. It is one of the largest manufactures of glass products in the United States, engaged primarily in the production and distribution of incandescent bulbs, signal and optical ware, heat-resisting (Pyrex) ware, and other forms of specialty ware. The field encompassed by Corning is commonly known as the pressed and blown field, or the non-container field, as distinguished from the container field. Corning does not now engage and during the period of this inquiry has not engaged in the manufacture of glass containers, with the exception of a limited production of tumblers.

The defendant Empire Machine Company, hereinafter referred to as Empire, was originally organized by Corning in 1909, under the laws of the State of Maine with its principal office at Portland, Maine, as a patent holding and developing company. Since 1922 it has owned substantially 43% of the stock of the defendant Hartford-Empire Company, Since the filing of the complaint in this case, the Empire Machine Company has been dissolved. It was represented in closing argument that there are no remaining assets of this company.

The defendant Owens-Illinois Glass Company is an Ohio corporation with its principal office in Toledo, Ohio. It owns and operates a large number of glass manufacturing plants scattered throughout the United States. In December, 1895, the Toledo Glass Company was organized by Edward D. Libbey and Michael J. Owens for the purpose

of developing Mr. Owens' inventions in glass producing machinery. In 1903, Mr. Owens produced the first fully automatic machine for blowing bottles. This is known as the suction type of machine, in which the molten glass is sucked up into the mold, in contradistinction to the gob feed type of machine developed later, in which the molten glass is dropped through a hole in the bottom of the tank or an extension thereof into the molds in a forming machine, the size and shape of the glass delivered being controlled by a mechanism known as a feeder machine. The feeder and the forming machine together constitute one unit fully automatic in operation, as distinguished from the Owens suction machine. The Toledo Glass Company caused the organization of the Owens Bottle Machine Company under the laws of New Jersey. This company was changed to The Owens Bottle Company in 1919, and in 1929 it merged with the Illinois Glass Company and became the Owens-Illinois Glass Company. The corporate predecessors of the Owens-Illinois Glass Company operated for some years as manufacturers of glass making machinery, and licensed and leased glass manufacturers in the use of such machinery. About 1909 Owens began the actual manufacturing of glassware and gradually shifted its efforts away from the manufacture of machinery except for its own use. About 1904, Owens began the purusit of a policy of granting exclusive rights to certain licensees in limited fields for the manufacture of glassware, and it obtained and maintained an influence over the industry which it thus divided by acquiring substantial stock interest in the licensed companies, such as Thatcher and Hazel-Atlas, defendants herein. The Owens-Illinois Glass Company is the largest manufacturer of glass containers in the United States. Its efforts are directed mainly toward the manufacture of what is known as narrow neck ware. It and its predecessors will hereinafter be referred to as Owens.

The defendant Hazel-Atlas Glass Company, hereinafter referred to as Hazel-Atlas, is a West Virginia corporation with its principal office at Wheeling, West Virginia. It operates numerous plants, distributed throughout the country. It was originally incorporated in 1901 as the Atlas Glass and Metal Company and later merged with the Hazel Glass Company. It is the second largest manufacturer and distributor of glass container products in the United States.

It directs its efforts chiefly to the manufacture of what is known as wide mouth ware.

The defendant Thatcher Manufacturing Company, hereinafter referred to as Thatcher, is a New York corporation with its principal office at Elmira, New York. It was organized in 1905. Its efforts are devoted chiefly to the manufacture of milk bottles, and in this field it is the largest manufacturer and distributor in the United States.

The defendant Lynch Corporation, hereinafter referred to as Lynch, is an Indiana Corporation with its principal office at Anderson, Indiana. With its predecessors, it dates back to 1917. It manufactures glass making machinery, and is the largest manufacturer of forming machines in the United States. It does not engage in the manufacture of glassware.

The defendant Ball Brothers Company, hereinafter referred to as Ball Brothers, is an Indiana corporation with its principal office at Muncie, Indiana. With its predecessors, it dates back to 1882. It is the largest manufacturer and distributor of fruit jars in the United States.

The defendant Glass Container Association, Inc., is a Delaware corporation with its principal office in New York City. It was organized in 1919 and is a statistical and research company. It does not engage in the manufacture of glassware. Its members include all but two of the glass container manufacturers in the United States. All of the corporate defendants herein are members of the Glass Container Association.

History of the Case

A brief resume of the history of automatic machinery in the glass container industry and of the contracts and agreements entered into by and between these various corporate defendants and complained of by the Government, is helpful to an understanding of the facts of the case. Acts and things done by the defendants and complained of by the Government cover a period of approximately 25 years.

There are today two fully automatic processes for making glassware—suction and gob feed. In the *suction machine* process, the glass is sucked up from the surface of an extension of the furnace into the mold where it is formed into the desired product. In the feeder fed machines, the glass is delivered to the mold by a special device known as a *feeder.*

In the gob feed process, the molds into which the molten glass is fed are parts of a separate machine known as a forming machine. In the suction process, the molten glass is sucked directly into the molds.

After the glassware leaves the forming machine, it is carried by a conveyor into a *lehr* or closed tunnel, where it is stacked on a belt which moves slowly through an annealing chamber. The purpose of this, of course, is to prevent the finished product from cracking due to rapid changes in temperature. The bottles at the front end of the lehr are at a temperature of over 1000 degrees Fahrenheit. The temperature gradually decreases as the bottle or container moves through the lehr. Upon its discharge the glass is cool enough to handle with bare hands.

The complaint deals with all four of these types of machinery, that is, the suction machine, the feeder machine, the forming machine and the lehr.

The suction machine was the first to appear and was the first fully automatic glassware manufacturing machine ever produced. It was put on the market in 1903 and immediately and completely revolutionized the industry, which had hitherto been limited to the hand-gathering method or to various types of semi-automatic methods. The Owens Bottle Machine Company possessed the exclusive rights on the suction machine. It licensed the use of that machine to manufacturers for specific kinds of ware, and thus set a pattern that was later followed by Hartford in the licensing and leasing of its automatic feeders. The Owens Company licensed Ball Brothers to make domestic fruit jars; it licensed Baldwin-Travis, later purchased by Thatcher, to make milk bottles; it licensed Hazel-Atlas to manufacture wide mouth ware; and it licensed the Illinois Glass Company to make narrow mouth ware. At the present time, only one of these licenses is outstanding, the license to Hazel-Atlas. However, Hazel-Atlas no longer uses the suction machine. Owens is the only concern that is now engaged in the use of that machine.

As a result of the licensing by Owens of only certain manufacturers, the remaining manufacturers in the industry were faced with the prospect of being forced entirely out of business unless a competing machine could be found. Extensive research and development programs were financed. The Brooke stream feeder was produced, but this

was unsatisfactory. The invention of suspended gob feeding followed. This gob feeder was found to be more economical for certain lines of ware than the suction machine, as the latter was then constituted, due chiefly to its ready application in the manufacture of diversified kinds of glassware, whereas the suction machine was better for long and steady runs on one item. Owens today uses both methods, suction and gob, although its use of suction greatly predominates.

Prior to the advent of the gob feeder, Owens had the whole field of automatic machinery for itself. Then, after the gob feeder was proved successful, Owens obtained certain patents and patent rights relating to that process, including the Brookfield and the Lott patent rights, and thereafter licensed a few companies in the use of its gob feeding machines.

Hartford was one of the pioneers in the development of the gob feeder. It proceeded to license and lease gob feeders in much the same manner that Owens had theretofore licensed its suction machines, that is, by issuing licenses to make specific kinds of ware.

Empire had been formed by Corning as a patent holding Company for the latter. Empire owned certain rights relating to the Chamberlin applications. Those applications were in interference in the Patent Office with the Hartford gob feeder applications.

On June 30, 1916, Empire and Hartford entered into an agreement wherein Empire was granted an exclusive license to use the patented glass making apparatus and processes of Hartford for the production of pressed and blown glassware, and Hartford in turn was granted an exclusive license by Empire to use the latter's patented glass making apparatus and processes for the production of glass containers. In this manner, and by this means, Empire obtained for Corning the exclusive right to Hartford's machinery and patents in Corning's lines of ware, to wit, the pressed and blown field or the non-container field; and Hartford retained a free hand with respect to the remainder. This is the first transaction that the Government complains of as a violation of the anti-trust laws.

There followed agreements between Empire, Hartford and Corning on October 6, 1922, resulting in the formation of the Hartford-Empire Company, although the evidence

discloses that the parties had agreed orally to the terms several years prior thereto. Hartford-Empire received all the assets of Hartford-Fairmont and all the assets of Empire Machine relating to the manufacture of machinery for the production of glassware. Empire received approximately 43% of the stock of Hartford-Empire. Corning received approximately the same exclusive use that Empire had received in the 1916 agreement, and Hartford-Empire received approximately the same rights from Corning that it had received from Empire in 1916, subject to a shop right in Corning that has never been exercised.

From 1916 to 1924, competition had arisen between Hartford and Owens with respect to the gob feeding process. They were in interference in the Patent Office together with other inventors who had invented, manufactured, and placed upon the market glass feeding machines. There was extensive litigation between the two companies. Numerous conferences were held between officials of the two companies from 1921 to 1924, looking to a settlement of their differences.

On April 9, 1924, Hartford and Owens entered into a written agreement by the terms of which Owens granted to Hartford an exclusive license on Owens' patents relating to feeders and forming machines, and Owens received the right to use the Hartford patents for the manufacture of glassware. Owens was not to sell or license any of its gob feeding machinery. It was excluded from the pressed and blown field that had previously been reserved to Corning. Owens received one-half of Hartford's divisible income over and above $600,000 per annum, to be collected by Hartford from its licensees. Section 22 of the agreement contained a provision that required Hartford to obtain Owens' consent to the granting of any new licenses on machines embodying Owens' inventions. In other words, Owens retained a veto power over the extension of licenses to use the gob feed machines of Hartford. This section was eliminated from the agreement in 1931. The agreement does not specifically mention suction machines, but, as will be shown later, it was the intention and understanding of the parties that there would be no undue competition between the suction and gob feed processes and that Owens intended to guard against any invasion of the suction field by anyone, including Hartford.

Immediately after the consummation of this agreement, the two companies set out to obtain control of the remaining feeder patents in the industry, sharing equally the costs and expenses between them, combining the efforts of their legal staffs for joint operation against the owners of feeder patents, and contributing equally to the cost of purchase and litigation expenses. Their goal was to control the licensing and production of glassware in the entire industry.

Hartford had purchased the feeder patents of the Howard Automatic Glass Machinery Company in 1921. In 1925, Hartford purchased the feeder patents of the W. J. Miller Company for $145,000, Owens sharing the purchase price. In the same year, Hartford purchased the feeder patents and applications of Tucker, Reeves & Beatty, sometimes referred to as the Federal Company, at a cost of $1,600,000, Owens contributing one-half of the purchase price. Both Miller and Tucker, Reeves & Beatty had important patent rights and were in extensive interference proceedings with Hartford and Owens in the Patent Office. The Miller Company, before the sale to Hartford, had manufactured its feeders and had sold them outright to glass manufacturing concerns. After the acquisition of the Miller rights by Hartford, the latter brought suit against the purchasers and owners of Miller machines with the result that eventually nearly all of them became licensees of Hartford, and title to the feeders was surrendered to Hartford. Tucker, Reeves & Beatty had licensed its feeder machines. After the acquisition of the Tucker, Reeves & Beatty rights by Hartford, the licensees of the former promptly became licensees of the latter.

Other feeder rights were obtained by Hartford through suit or threatened suit. It is Hartford's claim that all these patents or patent applications were dominated by Hartford's patents and patent rights. However, it is well here to mention that no controlling patents were issued to Hartford until 1926, and these were not tested in the courts until 1932.

Hazel-Atlas offered the strongest opposition to Hartford and Owens between the years 1924 and 1932. There was considerable litigation between them. Two important infringement suits were decided by United States Circuit Courts of Appeals in 1932, one in favor of Hazel-Atlas in the Sixth Circuit, and one in favor of Hartford in the Third

Circuit. Then, on July 1, 1932, Hartford, Owens and Hazel-Atlas entered into a series of agreements. Hartford granted to Hazel-Atlas the right to use Hartford patents and inventions, but Hazel-Atlas was not to license or sell such patents and inventions to anyone. Hazel-Atlas granted to Hartford the right to use Hazel-Atlas patents and inventions. Hazel-Atlas agreed to pay Hartford royalties for the use of the Hartford inventions. Hazel-Atlas was excluded from the pressed and blown field, which had previously been reserved to Corning. Hazel-Atlas and Owens were each to receive one-third of Hartford's divisible income, that is, the income over and above $850,000 per annum that Hartford collected from royalties and license fees.

The result of these agreements was that the remaining opposition to Hartford collapsed and everyone took a license from Hartford. At the time the complaint was filed in December, 1939, there were only four small companies engaged in the manufacture of glassware who were not under license and lease from Hartford, representing less than 4% of the total production in the industry. Three of these four companies are defendants in the courts at the hands of Hartford. The fourth company, the Kerr Company, manufactures glassware with the Brooke stream feeder and appears to be out of the reach of an infringement suit because the patents on that process have expired.

The history of the forming machine control differs somewhat from that of the feeder history. The forming machine control ended with Hartford and Lynch manufacturing substantially all the forming machines for the industry. Hartford had at an early date purchased the Cox forming machine patent rights, and in 1925, the year following its agreement with Owens, it purchased the Sears & Lobb applications. In 1924, Hartford, with Owens sharing equally in the cost, took an option on the Headley & Thompson forming machine applications controlled by the Whitall-Tatum Company. This option was exercised in 1933, when it appeared that the patents would issue with very broad claims and might dominate all narrow neck forming machines. Also in 1933, Hartford purchased the O'Neill forming machine patents.

Headley & Thompson had been in interference in the Patent Office for many years with Lynch. In 1933 the Patent Office held in favor of Headley & Thompson. Immediately

thereafter, Lynch purchased the Ed. Miller forming machine business located in Columbus, Ohio, a manufacturer of forming machines for the manufacture of wide mouth glassware. This transaction was accomplished through the financial assistance of Hartford and Owens, each contributing to Lynch the sum of $125,000. In addition, Lynch raised $200,000 additional through the sale of stock, with W. E. Levis, President of Owens, underwriting the sale thereof. Two days later, on August 23, 1933, Hartford and Lynch entered into a cross-licensing agreement whereby Lynch was given the right to sell forming machines embodying Hartford patents and inventions to anyone who obtained a forming machine license from Hartford, and thereafter Hartford granted a forming machine license free of royalties to its feeder licensees but charged royalty rates equivalent to the rates on feeders to anyone desiring a forming machine who was not a feeder licensee. In view of the fact that Headley & Thompson, now controlled by Hartford, was claimed to have dominated the Lynch forming machines, the result of the agreement was that Lynch could sell no narrow neck forming machines except to persons who had first obtained a forming machine license from Hartford. The Ed. Miller acquisition placed in the hands of Lynch wide mouth forming machine rights, and these apparently did not come within this requirement. This is the only situation in which the Government claims there is a violation of the Clayton Act.

Owens had already obtained an option on all present and future Hartford inventions in the suction field. In the purchase of the Ed. Miller Company by Lynch, the latter secured certain suction rights of the Miller Company. Owens purchased these from Lynch, in addition to any other suction rights which Lynch might have. Also in 1933, Owens purchased the Knox-O'Neill vacuum machine rights. As a result of these transactions, Owens substantially completed its program for the acquisition of all suction rights in the United States. So far as the record is concerned, no one can now manufacture and use this type of machine without the consent of Owens. While it is true that the original suction patents have expired, Owens has improvement patents which make it impossible for anyone to get a modern version of the machine. Owens, since 1924, has refused to license or sell its suction machines to anyone who did not already have a license.

In 1934, Hartford attempted to purchase the lehr business of the Amsler-Morton Company and, failing in that, sued the Swindell Brothers, a manufacturer of glassware who had purchased some lehrs from Amsler-Morton. Under the terms of the contract of sale, Amsler-Morton was compelled to defend this suit. It was limited in its defense of the suit, however, because Swindell was under license and lease from Hartford and had agreed not to contest the validity of Hartford's patents. Hartford prevailed in the Circuit Court of Appeals and Amsler-Morton was enjoined from further manufacture of lehrs.

On December 6, 1937, Hartford purchased title to the Nagle lehr from the Thatcher Company, and thus completed its control over the manufacture and licensing of all lehrs used in the glass container industry. It is contended by Hartford that there are in existence three or four other concerns that engage in the manufacture and sale of lehrs, but these are of so little consequence as to be negligible.

Thatcher obtained the exclusive right to manufacture milk bottle on Hartford's original paddle needle feeder in 1920. Hartford's first effort at the invention of a gob feeder resulted in what was known as the paddle feeder, and it came into production about 1916. The paddle needle feeder followed thereafter. Then came the single feeder, which is the machine in general use today. Prior to 1920, Thatcher had the exclusive right to manufacture milk bottles on the Owens suction machine. This was obtained early in the history of Owens, at a time when Owens obtained substantial stock holdings in Thatcher. All the other milk bottle manufacturers were gradually brought under the Hartford licensing system and, with the exception of the Liberty Glass Company, a small Oklahoma concern, were restricted in quantity. Owens also has an unlimited right to make milk bottles. Approximately two-third of all milk bottles manufactured and sold in the United States are manufactured by Owens and Thatcher.

Prior to 1933, Ball Brothers was the largest manufacturere of domestic fruit jars, but Hartford had never been able to license that company. Ball Brothers had operated on machines of its own design, as well as on the suction machine of Owens, the right to the latter having been obtained early in the life of the Owens Company.

On March 25, 1933, Ball Brothers took a license from Hartford and also obtained the residual rights of Hartford

in fruit jars. As a part of this transaction, several companies that were engaged in the manufacture of fruit jars under license from Hartford sold back to Hartford their limited fruit jar rights, or sold them to Ball Brothers. General Glass Company sold its fruit jar rights back to Hartford. The Knox Company sold its fruit jar right to Ball Brothers, with Hartford cooperation. Brockway's fruit jar business was sold to Ball Brothers by and with the cooperation of Hartford. Gayner did likewise under similar circumstances.

Much discussion was had as to the rights of Hazel-Atlas and Owens to manufacture fruit jars, and it was proposed that they be limited by written agreement to 300,000 gross and 100,000 gross annually, respectively. It was finally decided to refrain from setting such a restriction down in writing. However, since that date, neither of these companies has in any one year exceeded these limitations, with but one negligible exception. There is one additional manufacturer of fruit jars, the Kerr Glass Company, and that company is not a licensee of Hartford. At the time the complaint was filed, Ball Brothers manufactured approximately 54.5% of all the fruit jars manufactured and sold in the United States, Hazel-Atlas 17.6%, Owens 6.4% and Kerr 21.5%.

In 1935, the agreements between Hazel-Atlas, Hartford and Owens were revised, although they were originally designed to run until 1945. At the time of the revision, Hartford purchased Owens' right to participate in Hartford's divisible income for the sum of $2,500,000.

This whole system of purchases, agreements and mergers has resulted in a situation where less than 6% of the total production of glassware on feeders is on feeders not owned or controlled by Hartford, and this represents less than 4% of the total production on all types of machinery. The only other substantial production is that of Owens on its suction machines, and of course Owens does not have to pay royalties on its suction production.

It is impossible for anyone to obtain a feeder machine except by virtue of a license from Hartford. Owens has consistently refused to sell or license its suction machine. The same is true of forming machines and lehrs—a license must be obtained from Hartford. The result is that no new concern may engage in the manufacture of glass containers except with the consent of Hartford extended through a license

to use its machines—feeders, formers or lehrs. During the life of Section 22 of the 1924 agreement between Hartford and Owens, Hartford was required to consult Owens before it issued a license to any newcomer in the industry. As a result, it is contended by the Government, no newcomers have been admitted into the industry during the entire existence of the Hartford Company. Hartford claims that it has licensed two newcomers, the Northwestern and Diamond companies. Although Section 22 was stricken from the 1924 agreement by Hartford and Owens in 1931, yet the the record indicates that adherence to the requirements of this agreement has been carried on since 1931 without the necessity of a written agreement.

The Nature of the Case

At the outset, it is well to consider that this is a conspiracy case; that the alleged conspiracy must be looked at as a whole; that if the conspiracy as a whole is an unlawful one, then the Government has made out a case for relief.

In the Standard Oil Company v. United States, 221 U. S. 1 at 75 (1911), the Supreme Court laid down the principles followed by it in ascertaining the intent of the parties to restrain trade, to monopolize, and to bring about monopolization. The Court there said:

"the *prima facie* presumption of intent to restrain trade * * * is made conclusive by considering, 1, the conduct of the persons or corporations who were mainly instrumental in bringing about the extension of power in the New Jersey corporation before the consummation of that result and prior to the formation of the trust agreements of 1879 and 1882; 2, by considering the proof as to what was done under those agreements and the acts which immediately preceded the vesting of power in the New Jersey corporation as well as by weighing the modes in which the power vested in that corporation has been exerted and (3) the results which have arisen from it."

It may be well, therefore, in order to determine the intent of the parties involved in the case at bar, to consider, first, the conduct of the parties who were the main actors, second, the proof as to what the actors said and did, and, third, the results which their activities accomplished.

A total of one hundred and twelve days was consumed in actual time of trial and arguments. The evidence produced

is voluminous. The record of testimony and argument consists of over twelve thousand pages. There are over three thousand exhibits, consisting chiefly of letters, contracts and memoranda, that are considerably more voluminous than the record of testimony. This is primarily a documentary case.

In the course of the trial, many of the chief officers and attorneys for the defendant corporation appeared as witnesses at the behest of the government. Their testimony was utilized primarily for the purpose of identifying letters, memoranda and contracts that form the history of the case. Some of these witnesses conscientiously observed their oaths and freely disclosed matters within their knowledge; some of them quite apparently were testifying under difficulty because of the long period of time covered by the inquiry; and some of them, unfortunately, were clearly reluctant to make disclosures that their apparent physical and mental capabilities, and the positions occupied by them in the industry, would credit them with knowing. The reticence of some of the key witnesses to disclose what plainly was within their knowledge as principal actors in the main conferences that occurred over a period of time, and that resulted in the consummation of important agreements, was of such a pronounced character as to discount substantially the weight of their testimony, and their credibility, in the eyes of the court.

From a study of the entire record, I am convinced that there has not only been a violation of the anti-trust laws, beginning with the first agreement between Hartford and Empire in 1916, but I am convinced that this violation of the laws was deliberate as any that I can find in a review of anti-trust cases. The evidence is so conclusive that I can arrive at no other conclusion.

In many cases the court is required to rely upon inferences derived from circumstantial evidence, so meager is the record before the court; in many cases the court must rely upon inferences from some direct as well as circumstantial evidence and arrive at its conclusions accordingly; in this case, the men who planned and directed the proceedings under scrutiny, from 1916 down to the time of the filing of the complaint herein, left behind them numerous exchanges of letters and many memoranda executed contemporaneously with the happening of the main events and

designed for the information of their contemporaries, their boards of directors, or for their successors in office. It is hard to imagine a case in which a court would have more first-hand information of what the parties did and intended than in the case at bar. These documents indisputably make a case that sustains the Government's contention that the defendants have violated and are now violating Sections 1 and 2 of the Sherman Act and, in the case of Hartford and Lynch, Section 3 of the Clayton Act,

"by unlawfully conspiring, monopolizing, attempting to monopolize, and by unlawfully contracting, combining, and conspiring to restrain interstate and foreign trade and commerce, and more particularly by acquiring and maintaining monopolies of (a) patents covering the manufacture and licensing of glass-making machinery, (b) the manufacture and distribution of glass-making machinery, and (c) the manufacture, distribution, and sale of glass products, and by excluding others from the fair opportunity to engage freely and unrestrictedly in the interstate and foreign trade and commerce in said machinery and glass products."

Now let us examine into the conduct of the principal actors, the proof as to what was done by them, and the results that have arisen therefrom, in order to arrive at the intent of the parties.

The Conspiracy as Related to Feeders

Corning and Empire. There is very little evidence prior to the 1916 agreement between Hartford and Empire. The evidence does show that the two companies were in interference in the Patent Office through a conflict in the Chamberlin applications of Empire and the Peiler applications of Hartford, and that the two companies decided to settle their differences by leaving the container field to Hartford and the non-container field to Empire. Empire had been formed by Corning and Corning produced only in the non-container field at that time. So far as the production of Corning was concerned, it received everything that it desire-. Hartford was given the container field, much larger than the field left to Empire, but, of course, not as large as the whole field. While one purpose of the agreement was to settle patent interferences, the effect of the agreement was also to divide the field between them with a

provision that they would not compete in each other's field.

The agreement not only divided the fields of ware by giving the container field to Hartford and the non-container field to Corning, but it eliminated the impending competition between Hartford and the Corning interests in the glass making machinery field. In this connection it is well to note that Corning had "consistently maintained that the contract was a continual exchange of inventions and developments for prescribed fields regardless of patents." (Ex. 358)

There is considerably more evidence in the interim between the agreements of 1916 and 1922 between these companies which sheds light not only on the purpose of the 1922 agreements, but also on the purpose of the 1916 agreement. Some time in the year 1919, F. Goodwin Smith, who was at that time General Manager and who later became vice-president and then president of Hartford, wrote a memorandum concerning the proposed merger of Hartford and Empire. It reads in part as follows (Ex. 6):

"Working as one unit properly financed and properly organized, this unit owning or controlling the most modern patented automatic machine process for the various fields of ware—plus special glass formulas, would, within reasonable time, dominate the entire glass industry here in the States as far as manufacturing methods are concerned • • •

"The talent of both organizations combined should at once insure continual improvements in the art and in the design of the machines, which would insure the maintenance of leadership and practically prohibit any other organization from obtaining parallel results.

"Hartford or Empire working alone as individual units will to some degree block each other on the question of patent rights, whereas working together on a basis of exchange of patent rights, the position of each, singly or together, would be greatly strengthened."

This exhibit clearly shows that Hartford was at that time looking to a merger that would result in its domination of the art.

Exhibit 7 is a memorandum prepared by the same author, setting forth what occurred at a conference at South Dartmouth, Massachusetts, on August 2, 3, and 4, 1919, between A. B. Houghton, A. A. Houghton, Dr. Day and Alexander

Falck, representing the Corning and Empire interests, and F. Goodwin Smith, the author of the document, representing the Hartford interests, concerning the proposed Hartford and Empire merger. It reads in part as follows:

"Also told them that it was quite apparent to us that we must either proceed independently on a very much larger scale than we had in the past, or else consider the desirability of entering into negotiations with the Owens interests, Banking interests, or with the Empire Machine Company's interests * * *"

Houghton said, "That there should be no secret that if we thought a merger was not the proper procedure for us, they must immediately start an entirely separate company for intensive machine development—and that unquestionably this would result in additional competition and raise the continual question of rights between the Owens group, ourselves, and the Empire group * * *"

"He therefore thought, all points considered, that if we pooled our entire interests into one company on a 50-50 basis, it would be a proposition which would have a very large and successful future before it * * *

"There is no question in my mind but what the Owens Co. will increase their efforts to attack our patents as applied to all machines which we produce. This will prove costly as regards litigation, and may prove costly as regards some necessary changes.

"I also feel that the Owens Co. will be forced to let down the bars as regards their present royalty basis as received from their present licensees, which would at once create keener competition between the large Owens groups of manufacturers and our licensees * * *

"I also feel that it will be a very disturbing factor to have the Empire Machine Co. start out with a large capital and proceed to come into the field with a still separate line of automatic machinery."

The last paragraph clearly shows that Hartford wanted to eliminate a competitor.

Exhibit 8, written by W. H. Honiss, patent counsel for Hartford, dated October 4, 1919, to F. Goodwin Smith of the same company, reads in part as follows:

"In connection with your expected conferences of next week, it may be of use to remind you of some of the assets of the Hartford-Fairmont Company which, in aggressive hands, our own or others, might be made very useful in limiting competition."

Exhibit 9 is a memorandum written by F. Goodwin Smith in 1920, commenting on the proposed Hartford and Empire agreement. It reads in part as follows:

"Will not the combined ownership of patent rights dominate the Federal situation so as to preclude this Federal feeder becoming a competitor here in the States, as well as across the water? * * *

"Any concern which can offer the use of automatic machinery and special formulas ought to eventually control the key to the glass industry in this country and foreign countries * * *"

From the foregoing excerpts, it will be seen that as early as 1919 and 1920, Hartford was looking toward complete control of the gob feeding art; that it wanted to eliminate the competition of Empire and combine the assets and talents of both concerns in the ultimate fight for control; and that it thought their combined rights would dominate the Federal feeder, otherwise known as the Tucker, Reeves & Beatty feeder, an important rival which Hartford must necessarily face in the near future.

An important consideration for Corning in these negotiations was its relationship with the General Electric Company in the manufacture of electric light bulbs. General Electric was a licensee of Corning in the manufacture of bulbs. On October 30, 1920, V. M. Dorsey, patent counsel for Corning, wrote to A. D. Falck, president of that company, as follows (Ex. 677):

"I expressed an opinion that the whole bulb situation would be strengthened if a monopoly could be gotten into one hand, of the Flowing field, with right to take bulb licenses from the owner of such monopoly, and that unless the Hartford-Fairmont Company succeeded in doing this, as they expected to do, there would be a purely competitive field which would seriously injure the monopoly in the cheapest way of producing bulbs."

The monopolistic intention of Corning in entering into the agreements in 1916 and 1922 is further stated in another letter from Dorsey to Falck, dated September 24, 1921 (Ex. 1988):

"I have been forced to consider what we really intended to get under this Ware, Class D. As originally defined five years ago, it had two possible purposes,—

(1) To prevent the use of the Hartford machines by others in the manufacture of baking ware, irrespective of the quality of the glass.

(2) To let Corning use the Hartford inventions in baking ware, milk bottles, etc., if we should discover a new glass not containing boric oxide, but still usable.

"Since that time, Ware Division C has been broadened out in one way so that it no longer demands the use of boric oxide in the glass, but covers all that we really consider good glasses.

"From this it seems to follow to me, that Ware Division D could be now well changed to cover only glass-ware in which food is cooked in an oven, i. e., Oven-Ware. This will prevent our baking dish competitors from using the Hartford-Fairmont inventions without our consent, for making competing ware in the baking field, and will permit us to license them to make such ware with the Hartford invention even though the glass is of inferior quality."

It will be seen from the foregoing that the intention of Corning in entering into the original agreement with Hartford in 1916 that effected a division of the fields of ware, was not primarily to settle interferences that then existed in the Patent Office involving the Chamberlin patents of the Empire Company and the Peiler patents of Hartford. The primary intention was "to prevent the use of the Hartford machines by others in the manufacture of baking ware." It was to "prevent our baking dish competitors from using the Hartford-Fairmont inventions without our consent." And it was to "permit us to license them to make such ware with the Hartford inventions even though the glass is of inferior quality." This, of course, meant that the competitors would be charged royalties even though the output was of inferior quality.

The agreements of 1922, including the so-called "Formation Agreement," effectuated a merger of the Hartford-Fairmont and Empire companies into what thereafter was known as the Hartford-Empire Company. The relations between Hartford and Corning were renewed and strengthened.

In 1930 and 1931, negotiations were had between officials of Corning and Hartford with a view toward revising the contractual relationship between the two companies. H. K. Smith, secretary and general counsel of Hartford, prepared a memorandum on December 29, 1930, setting forth the status of the discussions on revision of the contracts. Speaking of the question of the respective fields for the two companies, he stated (Ex. 392):

"This is by far the most difficult and important point of difference between the two Companies. It is very complicated; it is rather hard to get any general principle which will apply throughout for a division of fields and it is hard for each party to foresee the course which the glass industry may take in the coming years.

"It is my impression that Judge Green and I have reached a very vague agreement to the effect that, with many exceptions and reservations, the Corning field is, naturally, the monopolistic high quality field and the Hartford field is, naturally, the competitive low quality field. But as soon as we begin to go any further in detail we arrive at serious differences * * *

"Corning also raises the question of whether it cannot have a right to make containers out of ordinary glass at standard royalties. To grant any such right is contrary to Hartford's present and long established policy of endeavoring to limit competition between its licensees within reasonable bounds, and Hartford, especially at present, would be quite adverse to putting into this very competitive field a new and powerful competitor."

On March 3, 1931, the same author wrote a memorandum "On the Revision of Glass Contracts Protecting Monopolies." It reads in part as follows (Ex. 393):

"1. The present Glass Contract"—between Corning and Hartford—"gives now * * * what Corning wants; namely, Hartford's support and protection of Corning's

monopolies. The proposed *new* contract, in the form Corning wants, will do the same, but over a much wider scope, i. e., as to furnaces, handling and finishing devices, and lehrs, in addition to feeders and formers.

"It, therefore, raises the basic question in more acute form.

"2. What Corning wants is that H-E should so tie up all H-E's inventions as to protect Corning's special fields from competition *by H-E's licensees or assignees,* even after the failure or expiration of the patents now covering those fields * * *

"Now, what support, conversely, can H-E expect for *its* monopolies from Corning? Assume that H-E feeder patents fail or expire. How will our hold on glass feeding be saved or improved by anything coming from Corning under the Glass Contract?

"This contribution and support of Corning for our monopoly is not very imposing * * *

"11. I do not see that the addition of furnaces will alter the principles above.

(a) It is, however, a very important addition. Probably the next greatest advance will come here. It will have the special advantage of reducing costs *without* increase of production.

(b) A real patent or patents in this line would be a powerful support for our respective monopolies. For practical reasons a merger of interest here is desirable, because furnaces are used for all fields, and separate development programs mean waste and possibly patent deadlock."

It will be seen from this that Corning was looking forward to the day when its patents on the so-called Pyrex ovenware, known as heat resistant ware, would expire, and was making arrangements so that it would have the exclusive use of the Hartford feeders for the making of heat resistant ware in the years thereafter. This is the exact situation that obtained at the time of the filing of the complaint herein.

Again, quoting from the same document:

"32. *Protection of Monopolies*—This is perhaps the most difficult question remaining. We agree on the general prin-

ciple that it is desirable that each party should use its patent strength to protect the exclusive fields of the other."

This plainly is an illegal, cooperative effort upon the part of Corning and Hartford to use the patent strength of each to protect the exclusive fields of the other. It is a cooperative effort for the purpose of maintaining monopolies.

From the above extracts, it is plain that the purpose of entering into this contractual relationship, both in 1916 and 1922, was, from Hartford's viewpoint, to eliminate Empire as a possible competitor in automatic machinery, to obtain Corning's support in getting and maintaining a monopoly on automatic machinery, and to eliminate Corning as a manufacturer in the container field; and, from Corning's viewpoint, to obtain from Hartford a monopoly in the manufacture of non-container ware.

The result of these contracts was to give Corning the power to exclude all others from Corning's fields. During the years that followed down to the filing of the complaint herein, there are many instances where manufacturers were kept out of Corning's fields, either by Hartford alone or by Corning's refusal to consent to their entrance into its fields. Hartford refused requests by Fry Glass Company, Mantle Glass Company, Owens, Bartlett-Collins and Swindell Brothers. Corning refused to consent to the licensing of MacBeth-Evans, Fairmont, Indiana Glass Company, McKee, and Anchor Hocking. The record does show that in two or three instances limited licenses were granted in this field with Corning's consent.

Corning's valuable glass composition rights for heat resistant ware and oven ware expired in 1936, but Hartford refused to license anyone to make this ware on its feeders, thus helping Corning to maintain its monopolies.

The contract between Corning and Hartford does not in itself give Corning any control over the future policies of Hartford. But that Corning does exercise such a control consistent with its own desires is clear. A. D. Falck, president of Corning, in exhibit 676, dated June 8, 1920, wrote that it was decided

"not to make this request, as we have entire confidence in you and your group. We will, however, wish to participate actively in formulation of policies and major decisions, and I assume from what you have said to me that this will be your desire."

Also, F. Goodwin Smith of Hartford wrote to A. D. Falck on October 27, 1927 (Ex. 271):

"at the time of the formation of the Hartford-Empire Company, you considered Empire's minority holdings of 45% amply protected, as Beech-Nut, Hartford and Monongah represented to you three separate and distinct holdings, and, further, that these three groups might not always agree among themselves. Therefore, from a practical standpoint the 45% held by Empire was to all intents and purposes as good as control."

In addition to the 45% of the stock of Hartford that is held by Corning through Empire, the record indicates that there have always been at least four of eight to nine members of Hartford's board of directors who were also directors of Corning or Empire. Hence Corning not only had an exclusive license from Hartford covering the non-container field, but it also in practical effect had sufficient control over Hartford to dictate the policies of Hartford in accordance with Corning's wishes.

In 1922 these two companies, Corning and Hartford, did not have an actual monopoly of feeders. At that time there were four serious competitors of Hartford in the gob feed field. These were the Howard Automatic Machinery Company, the Owens Bottle Company, the William J. Miller Company, and the Federal Company, the latter having control of the Tucker, Reeves & Beatty feeder rights. Hartford was in litigation and interference with all these companies. But by the end of 1925, Hartford owned or controlled all the feeder rights which these companies possessed.

Howard. The Howard interests were the first to come under the control of Hartford. This was accomplished by outright purchase. Howard had licensed some of its machines and in taking over the patent rights it was necessary that Hartford prevent the Howard licensees from obtaining a defense of estoppel against Hartford, in order to leave Hartford free to sue them and force them to take licenses from Hartford. To this end the Beech-Nut Packing Company, which was one of the original organizers of Hartford, purchased the stock of Howard and then transferred it to the Hartford Special Machinery Company, which in turn transferred to Hartford all the Howard patent rights. We

shall later see just what relationship an involved transaction of this kind has to the reference of the Supreme Court to "manifestations of guilt."

The purpose of Hartford in entering into the Howard transaction is clearly expressed by F. Goodwin Smith of Hartford in a statement to his Executive Committee on June 23, 1922, as follows (Ex. 58):

"If outstanding, he presents a very serious competitor commercially * * *

"The sale of Howard to Owens would be distinctly disastrous, probably the worst single thing that could happen. That Owens has twice tried to buy out Howard, making considerable offers therefor."

That Howard was an active competitor of Hartford is further shown in a statement by V. M. Dorsey, patent counsel for Corning and Hartford, on April 12, 1922 (Ex. 57):

"Howard has a going business and a feeder which can compete with ours unless properly shut up."

The same author wrote to F. Goodwin Smith on December 27, 1921 (Ex. 1522):

"I repeat what I have said that so far as affects the suppression of piracy and control of the gob feeding art, I believe the deal with Howard is more effective than any deal you can make with Owens * * *

"* * * I again say that you will not by reason of your deal with Owens be able to stop pirates * * * On the other hand, the deal with Howard permits an immediate, effective, offensive campaign coupled with the necessity of protecting our rear from Owens."

Thus it is plain to be seen that Hartford's purpose in entering into this transaction was both to eliminate a competitor and to obtain rights which could be used against other competitors. It is well at this point to again keep in mind that while Hartford was an applicant for basic patents, none was actually issued to it by the Patent Office until 1926. Regardless of this, Hartford refers to its competitors as "pirates."

Owens. The next important step was an agreement by Hartford with Owens that eliminated all competition between them. From the record, this appears to be the most

important and far-reaching step ever taken in the history of the industry. The negotiations extended over a period of several years, beginning about 1919 and concluding with a written agreement dated April 9, 1924.

At the time negotiations between the two companies commenced, Owens was primarily a manufacturer, although it still licensed some concerns in the use of the suction machine and had outstanding a few gob feeder licenses.

We now come to another fundamental motive behind the desire of the defendants to concentrate the control of automatic machinery in the hands of one individual. We have already seen that it was Hartford's desire to obtain domination of the feeder art, and this, of course, was for the purpose of receiving the greatest possible income from its proposed licensing system. Owens' main purpose was different. Owens wanted stabilization of the industry in the marketing of glass products so that higher prices might be charged. A means to that end was the control of the feeder business in the hands of one concern, with enough control retained to enable it to keep everyone in line. Thus, the feeder monopoly was a means to an end so far as Owens was concerned. With Hartford it was the other way around. Hartford wanted a feeder monopoly in order to obtain the greatest possible income from royalties. A means to this end was the stabilization of the industry, since a well stabilized industry meant that higher royalties could be absorbed and passed on to the consumer. Thus, stabilization of the industry was a means to an end so far as Hartford was concerned. We will now look to the exhibits which show these purposes and how the companies worked together so that each might obtain its desired end.

During the negotiating period, various plans were offered and rejected or modified. Many conferences were held. The conferring officials of the two companies followed Hartford's policy of preparing memoranda of these conferences as a means of communication with their brother officers, boards of directors, etc. At times it appears that the negotiations had definitely failed. During the entire period of the negotiations, the record indicates that Michael Owens of the Owens Company assumed the initiative in presenting his ideas and the ideas of his company to the Hartford representatives. His expressed convictions looking to a regulated control of the glass container industry cannot

be misinterpreted. The general situation at the beginning of the negotiations is clearly set forth in a memorandum prepared by H. K. Smith of Hartford, dated December 23, 1921, in which he set forth what occurred in a conference between officials of the two companies (Ex. 23):

"3. Mr. Owens stated that a number of years ago there had been developed and put into commercial operation glass feeding and forming machinery, broadly known as the Owens machine. At that time the industry was in very crude shape, and in rather precarious condition; that this new machine became adopted, glass manufacturers used it for a number of years and became generally prosperous, and that everything was happy until the rise of the device or process which Mr. Owens referred to as the 'plug feeder'—probably intending to cover thereby the general method of feeding by the plug, needle, or in gobs, as distinguished from the Owens suction method.

"4. That up to this time the industry had become fairly stabilized and was in generally sound condition. That the Owens Company had adopted the general policy of taking in royalties one-third of the saving made by their machines.

"5. But then, upon the appearance of the said new process, trouble arose all around. The patent protection, which had hitherto stabilized the industry, was assailed, seriously endangered.

"6. That he had made two attempts to come to some adjustment with the Hartford-Fairmount Company * * *

"7. That the Owens Company were now making a third attempt to get some solution of a very serious situation. That if they did not succeed in doing so, they would have to fight over the entire field to a general finish, by all proper means.

"8. That the Owens Company would go in for such a fight expecting one or the other of the following final results:

a. Either that the Owens Company would result in dominating the entire glass industry,—or

b. The whole field of the industry would be thrown wide open on a purely competitive basis, with no considerable patent protection for any one, and any 'farmer' could take up this cheap method and go into the glass business. * * *

"11. He, however, preferred to disregard in this discussion any concrete questions of the merits of patents, assuming that each side has a strong patent position and is thoroughly confident of that position. Assuming this—the fact nevertheless remains that as long as Owens and Hartford continue to fight each other, the so-called 'outside feeders' will continue to operate and increase in number, with all their destructive effect on the stability of the industry. That as long as these outsiders know that our two companies are fighting with each other, the outsiders will feel safe, or at least safe enough, to go on and increase their present hold on the trade. They are, however, badly scared on the merits of the patent questions and if the Owens and Hartford companies should combine, they would probably run to cover * * *

"16. Mr. Goodwin Smith then said that he agreed with Mr. Owens, namely; that the future stabilization of the glass industry was most important and most essential to both interests, and that he personally was particularly worried as to what the outcome would be if continual patent litigation between Owens and Hartford destroyed all advantages of any patent monopoly and permitted outside feeders to continue to license their machine * * *

"Mr. Smith stated, however, that he felt some means could and should be worked out whereby Owens and Hartford could combine their patents and skill to effect the stabilizing of the industry. * * *

"19. All of the Hartford representatives indicated that they were in agreement with the position stated by Mr. Owens as to the danger of unstabilizing the industry and of destroying or greatly reducing the present patent control of it, and that they also agreed that it was very important that the two companies should take any measures they could to prevent such dangers."

This exhibit shows that the considerations which prompted the officials of the two companies to negotiate were (a) competition between them in licensing and (b) stabilization of the industry.

At a later date another meeting was held between representatives of the two companies, and a memorandum of this conference was written by H. K. Smith of Hartford,

exhibit 26, dated January 17, 1922. He wrote that J. C. Blair, of Owens, stated at the conference that

"there should be in the glass industry some concern like Owens in a sufficiently strong position practically to force a stable price policy upon all important producers; that if Owens, by the plan as above suggested, had the free use of its own suction feed and the free use of the gob feed it could then go to any other producer who threatened to cut prices and unstabilize the market, and inform him that such a policy was detrimental, but that if the outsider persisted in doing so Owens had a sufficient margin, by reason of its free use of both devices, so that if necessary it could come out on top in a price war and still make money. He felt that some such stabilizing influence was necessary and that it could only be established through one company having such a peculiar strength as would be given in this case."

Exhibit 1962 is a communication by W. H. Honiss of Hartford to F. Goodwin Smith of Hartford dated January 26, 1924:

"Toledo naturally wants one or both of:

"(a) The control of our licensing to keep a check on growing competition from our future licensees.

"(b) A large share of our income as an edge in meeting such competition."

Thus it is plain that one element of stabilization of the industry was the elimination of price-cutting and the establishment of a stable price policy. Owens wanted to be in a position to dictate the prices which could be charged for glassware by having a sufficient lee-way in cost so that no one could fairly compete with it. Owens could then force competitors to sell at its prices. If they refused, Owens would be in a position to win out in a price war.

Exhibit 21 is a letter from F. Goodwin Smith of Hartford to E. M. Ashcraft of the Illinois Glass Company. At this time, Ashcraft was engaged as an intermediary between the Hartford and Owens companies. He was tied by obligations of his company to both Owens and Hartford. The Illinois Glass Company was an early licensee of Owens for the use of the suction machines in the manufacture of narrow neck ware. At a later date it became a licensee of Hartford

for the use of the gob feeder in the manufacture of narrow neck ware. The letter is dated February 15, 1921, and reads in part as follows:

"Owens also went on to say that he doubted very much whether either Howard or Miller or ourselves or anybody, as a matter of fact, would control the basic claims for gob feeding—that he thought the control was very much split up,—probably we had valuable claims, Howard had valuable claims, Miller had valuable claims, and that Owens could contribute something of value. Therefore, it seemed very logical that we in some way or other should get together with the Owens Company to see if the gob feeding method could be entirely controlled by the two companies, even if it meant acquiring Howard and others.

"Owens felt that if no one controlled the gob feed method, the whole field would be open to a number of feeders which would unstabilize the general trade, and that our licensees would be thrown into competition with a lot of small factories that could get Howard or Miller feeders on a 5¢ or 6¢ royalty rate."

This letter indicates that Owens was not so much interested in the patent angle as it was in the ultimate control of the patent situation by someone who was in sympathy with Owens' desire to stabilize the industry. There are many other exhibits that clearly show the negotiations were intended to eliminate competition between Hartford and Owens, to control the gob feeding art, and to stabilize the glassware market.

Exhibit 24 is a memorandum by F. Goodwin Smith of Hartford dated January 24, 1922, and reads in part as follows:

"I think it must be definitely assumed that the offer of Owens was based:

"(a) To prevent patent and commercial war between the two methods of manufacture—Suction Machines vs. Gob Fe-d Machines.

"(b) To stabilize the industry and strengthen patent assets for the purpose of eliminating outside feeders and machines. * * *

"High rates of royalties, Owens maintain, will stabilize business and place them as a company in a very strong position to control and dominate."

Exhibit 30 is a memorandum of a conference by H. K. Smith of Hartford, dated March 3, 1922, in which he states

"That this negotiation is exclusively directed at harmonizing the situation as between the suction and gob feeds * * *

"Owens wants——

"(a) Stabilization of the industry
"(b) Raise royalties
"(c) Control status of gob and suction feed in container field."

Exhibit 574 contains a part of the minutes of an Executive Committee meetings of Hartford on April 19, 1922:

"Other features of the plan were that H-F should receive general immunity for its gob feeders and its formers from Owens—that some restriction preventing over-plant investment and price-cutting was to be placed on the licensing of gob feed by H-F and that Owens should agree not to license their gob feed at all in competition with H-F. That the whole plan should be probably conditioned upon getting the consent of the majority of our licensees to a satisfactory royalty raise. That the two companies would cooperate actively in attacking the outsiders, sharing equally in the expenses including cost of buying out outsiders, if necessary, and equally in the proceeds."

Exhibit 32 is a memorandum by H. K. Smith of Hartford relative to a conference with J. C. Blair of Owens on April 20, 1922:

"It would be a prerequisite that a substantial majority of the H-F licensees should agree beforehand on a proper royalty raise. This extra payment would probably have to be conditioned upon the maintenance, generally speaking, of the gob feed monopoly; that the licensees would undoubtedly say—'Suppose we agree to pay this extra rate and then both your patents and those of Owens fall down so that the field is entirely open. Have we got to go along paying this raise?' I said it seemed to me fairly obvious that the licensees would object to such a possibility. I did not see just what form of guarantee we could give them as to the maintenance of the monopoly. We could not, of course agree that these payments should be conditioned upon the abso-

lute exclusion from the industry of every outside form of feeder; that on the other hand they were entitled to a substantial protection. * * *

"That Owens was not to license its gob feeder to outsiders or in competition with the Hartford gob feed and that some reasonable restrictions shall be placed upon H-F so that it shall not license its feeders in such a way as to produce over-plant investment or danger of price-cutting."

Exhibit 1925 is a communication by A. D. Falck of Corning to F. Goodwin Smith of Hartford, dated April 25, 1922:

"The value of the whole deal depends upon the extent to which gob feeding processes can be monopolized, and therefore the Howard situation and possibly the Federal must be appraised and provision made for controlling them by successful suit and bringing the users in as sources of income or, failing a control by successful suit, by purchase on a fifty-fifty basis, to which purchase I think Owens must be positively committed."

The last communication indicates that the settlement of patent interferences or infringement suits was not the impelling reason why Hartford and Owens wanted to join their interests, but it does definitely indicate that they were aiming at a complete control of the gob feed process and that they aimed to effectuate that control by purchase of outside feeder patents and rights on a fifty-fifty basis if they failed to gain control by successful suit. The record shows that in due course Howard and Federal were both purchased, the former alone by Hartford and the latter through joint contribution of Hartford and Owens.

On Aprils 22, 1922, H. K. Smith of Hartford wrote to J. C. Blair of Owens as follows (Ex. 34):

"There is another point which I think I ought to touch on. As we understand it, this arrangement will practically divide the industry, so far as our two companies are concerned, into two branches—the suction process branch controlled by Owens and the gob feed branch controlled by H-F. We both recognize that there is a distinct field for each of these processes. It would seem then to be the proper thing to let the two processes go along side by side and each develop the proper field as the demand from the

industry would naturally work it out. But, of course, we both also recognize that it would be unfortunate to have this parallel development of the two processes reach a stage where competition between the two became generally destructive and unstabilized. With this in view we have accepted the proposition that restrictions tending to preserve stability shall be imposed, and, of course, it is just as important that the suction process and any future development of it should not be used to unstabilize the industry, as it is that the gob process should not be so used. I have tried to state this idea in Section 6 of the memorandum.

"I think we both recognize that when it comes to defining these restrictions, necessary for stability, we shall probably have a good deal of difficulty, but I still feel that it can be done with a fair degree of success."

Here it appears that restrictive licenses were to be resorted to in order to effect stabilization of the industry. Restrictions in the licenses would, of course, be feasible because of the plan followed by Hartford of refusing to sell its machinery outright. By retaining title to its machines and licensing a use thereof and exacting from the user a royalty on all glassware produced from it, Hartford now appears to be considering cooperation with Owens in the use of these restrictions, not as a part of its patent privilege as a patentee, but because "we have accepted the proposition that restrictions tending to preserve stability shall be imposed."

Exhibit 37 is a memorandum by H. K. Smith of Hartford, dated April 27, 1922:

"4. It is agreed in principle as follows: • • •

"(b) That Owens Company is able to contribute substantially to the maintenance of the Patent monopoly on gob feed.

"(c) That H-F's contribution to such maintenance will be greater than that of Owens Company.

"5. That the commercial considerations, involved in considering either an agreement or a conflict between Owens and H-F, are of greater importance than the relative patent values controlled by the two companies. By 'commercial considerations' is meant the domination of outside feeders, the stabilization of the industry tending against irresponsi-

ble price-cutting; the general co-operation between the gob and suction processes for an orderly development of the two side by side, such as will be most beneficial to the interest of the two companies and to the industry; and finally the steadying influence that will be established in the machine side of the industry by a recognized co-operation between the two companies.

"6. That there is a broad field for the application of the gob process and that, broadly speaking, the two processes in the hands of friendly companies should be allowed to develop side by side and find their natural field and expansion.

"7. That under some such arrangement as has been generally discussed in these negotiations H-F would have entire discretion as to the licensing of the gob feeders, and Owens would not license its gob feed in competition therewith * * *

"11. Contributions by Owens Company * * *

"(c) Contributing to the control of the outside feeders, to the stabilization of the industry and the establishment of a substantial monopoly over the gob feed process * * *

"17. There is a further disagreement on the relative values, outside of cash, offered by Owens and H-F. The chief factor in this question is that which relates to maintaining the gob monopoly permanently, and deals with the relative values of the patent defenses offered by H-F and Owens for that purpose."

Here the parties are in agreement that the "commercial considerations"—and by that they mean the domination of outside feeders and the stabilization of the industry tending against irresponsible price-cutting—are of greater importance than the relative patent values controlled by the two companies.

This appears to be conclusive of the question as to whether or not the agreement about to be entered into was brought about primarily for the purpose of settling Patent Office interferences and litigation in the courts, or whether it was done so that, by joint efforts and through the cooperation of the two companies, dominance over the entire glass container industry might thereby be obtained. It appears un-

questionably that the settlement of patent differences was secondary in purpose.

Here also is an agreement about to be entered into between owners of competing patents, each patent employing and defining a separate method in the making of glass products, to wit, the gob feed method and the suction method. A combination of competing patents for the purpose of obtaining domination — a field of industry, where such competing patents represent the only commercially practicable methods in a field of industry such as the glass container industry, has the effect of destroying the competition that has theretofore existed between the two methods of manufacture.

"Combinations between owners of independent patents, whereby as a part of a plan to monopolize the commercial field, competition is eliminated, are within the Sherman Act, for the reason that the restraint of trade or monopoly arises from combination, and not from the exercise of rights granted by letters patent." Blount Manufacturing Co. v. Yale & Towne Manufacturing Co., (D. C. Mass. 1909) 166 Fed. 555 at 562.

While there was no combination of the suction and feeder patents in the case at bar, the owners did enter into an agreement with the understanding that there would be no undue competition between the two methods, as will be discussed more fully later in this opinion.

Exhibit 1892 contains minutes of an Executive Committee meeting of Hartford on April 19, 1923:

"Voted: That the present form of the negotiations with the Owens Company be discarded and that the whole matter be taken up anew with Owens Company on approximately the following basis:

"(a) That no deal between our two companies alone would in any way make a clean-up of the gob feed situation or stabilize the industry.

"(b) That to do this, it is necessary to settle the factor of the Federal patent rights and licensing business.

"(c) That as each of our companies, Hartford-Empire and Owens, have something on the Federal Company, the best strategy is for our two companies to go against Federal in unison. This makes a stronger attack and cuts out the

chance of the Federal Company playing one of us off against the other.

"(d) That this, if carried out successfully with Federal, is the one procedure which will promptly and completely stabilize the situation and stop the very serious Miller advance."

Exhibit 43 is a memorandum written by F. Goodwin Smith of Hartford, dated April 27, 1923:

"2. *Stabilization:*

"We concur and urge the necessity of taking immediate action towards controlling the present feeder situation, and submit the following form of an agreement,—any agreement to merely cover the Container field:

1. Owens agrees to turn over to Hartford its present gob feed patents and applications pertaining to feeders and formers. . .

2. A deal with Federal to be made, whereby Federal is assured a definite income for a definite term of years, in return for Federal turning over to Hartford all their patents, applications and licensees all income above the net amount guaranteed Federal, to be divided between Owens and Hartford 50-50.

3. Users of Miller feeders to be sued for infringement by Hartford, with agreement that they either be stopped or certain ones be allowed to continue to use Miller feeders at higher rates of royalty than Hartford is now asking."

From the above extracts it will be seen that Owens was primarily interested in a stabilization of the industry. Later we will go more fully into what the parties meant by "stabilization of the industry." Hartford was fully in accord with this desire, and was willing to go along with it, because it meant that when Hartford obtained control of the feeder art, its income would be enhanced through the power to charge high royalty rates.

As early as the date of the purchase of the Howard assets, Hartford recognized the desirability of stabilizing the feeder situation. Exhibit 1889 contains a statement by F. Goodwin Smith of Hartford to the Executive Committee of Hartford at a meeting on May 18, 1921, to the effect that he

"felt that the Howard feeder was sufficiently good to upset trade conditions in general, inasmuch as this feeder when operated by the smaller glass concerns would permit the small concerns to continue to exist and at the same time quote prices which would be detrimental to the general trade."

Again, exhibit 56 is a memorandum by F. Goodwin Smith of an interview with Howard on April 25, 1922:

"Howard stated quite frankly that he realizes something ought to be done to stabilize the trade, and that in general he would be willing to consider any proposition that gave the stockholders a reasonable return and did not destroy the prestige which he and his company had obtained."

Corning also thought that stabilization of the industry was a factor to consider. Exhibit 1928, a letter written by A. D. Falck of Corning to V. M. Dorsey on July 25, 1923, reads in part as follows:

"On the whole, however, it seems to me that substantially all the points I have raised in a crude way have the merit of being absolutely fair. The fundamentals of an agreement with Owens for the settlement of our patent differences, the stabilization of the commercial container business, and the sharing with Owens under conditions of the income can all be met without including in the agreement any of the provisions which I consider improper and unfair."

The issuance of new licenses would, of course, play an important part in the program of stabilization. On this point, Dorsey thought that there might be trouble. Exhibit 612 is a letter from H. W. Carter, of the Patent Department of Owens, to J. C. Blair of the same company, dated August 14, 1923, in which the author stated that another problem was,

"with regard to the proposed participation of Owens in the future conduct of the feeder business. As to any such arrangement, Dorsey would, in the first place, be in fear of the anti-trust laws, and in the second place, could see no basis of agreement between a company which must primarily regard the granting of licenses from the point of view of greatest possible income, and a company which, on the other

hand, would primarily have in mind the effect of such licenses on competition."

Eventually, however, the officials of both companies realized that a cautious policy with respect to issuing licenses worked for the best interests of both.

Hazel-Atlas at this time was a large manufacturer of glass containers and, of course, the policy adopted by it would have considerable bearing on whether the industry could be stabilized in the manner in which Owens and Hartford desired. However, this possibility was evidently taken care of. In a memorandum by H. W. Carter of Owens, dated November 7, 1923, he states (Ex. 611):

"They"—Owens and Blair—"even stated, as their view, that the advantage of having the feeder field under some patent control is so great, from a business standpoint, that this company would rather see such control in the hands of Hartford than to have the field open—that consequently if we should lose out on Lott, we would have no interest in holding Hartford in the Patent Office by interference proceedings, or in defeating Hartford's claims in court—that our interest would rather be in aiding Hartford to maintain its control, than to narrow or defeat its patents, or delay their issue.

"To my inquiry as to whether we could rely on Hazel-Atlas going with us in this policy, their answer was in the affirmative—that they were anticipating no difficulty in this respect. Mr. Owens quoted statements of Mr. J. C. Brady which would lead to the conclusion that the Hazel-Atlas Company would rather pay royalties for the use of its plug feeders, than to have the field open, quoting him further as saying that they could, if necessary, return to the flow feeder for their line of ware in case the royalty situation became too onerous."

The agreement of April 9, 1924, shows how Owens finally obtained its position of dominance in the industry and how it was placed in a position whereby it could force its policy of stabilization upon the rest of the industry. The agreement gave Owens the use of 40 feeder units, free of royalty. In addition, Owens did not have to pay royalty on its suction production. Finally, Owens was to receive one-half of Hartford's income from royalties over and above $600,000.

Hence Owens not only did not have to pay royalties on nearly everything it produced, but it also received a share of the royalties paid to Hartford by all the other licensees of Hartford, some of whom were competitors of Owens. This resulted in Owens obtaining a very favorable position and one in which it would have the power to enforce a stable price policy in the industry.

The procedure to be followed in arriving at the ultimate goals of Hartford and Owens was the elimination of competition between themselves and their respective gob and suction processes, an attack against all outsiders until Hartford had complete control over all automatic machinery used in the production of glassware, and then the licensing by Hartford of every glassware manufacturer in the industry.

Immediately after the agreement of April 9, 1924, the two companies began a systematic program for the elimination of all competition. First, they settled the patent interferences and court litigation existing between themselves. Not only did they settle these interferences and suits, but they did so with an eye to coming out of the Patent Office with the strongest possible claims and patents with which to attack the remainder of the field. For example, claims were dropped if the effect was to make other claims stronger, or the claims in their prespective patent applications pending in the Patent Office were shifted about so as to bring out the strongest possible patents.

The agreement of April 9, 1924, did not cover all the inventions of both concerns. However, the companies showed a spirit of cooperation in matters outside the contract, which is an indication that the agreement was not based on patent considerations. Exhibit 614, signed by R. D. Brown of the Patent and Licensing Department of Hartford, and J. F. Rule, of the Patent Department of Owens, dated September 2, 1925, reads as follows:

"The undersigned believe that it is for the interest of both companies to mutually disclose, consider and settle any overlapping or conflicting matters of inventions that may arise between the companies, even though such overlapping or conflicting matters may be outside the field of licensed inventions.

"It is therefore requested that permission be given to the patent attorneys of the respective companies to dispose of

any such conflicts by agreement of such attorneys or by means of the arbitration system which is now in force as to matters falling under licensed inventions."

W. J. Miller and Tucker, Reeves & Beatty. Two very important steps were taken in 1925. In that year the assets of the W. J. Miller Company were purchased, as were also the patent rights of Tucker, Reeves & Beatty, sometimes referred to as the Federal Company. The two companies, Hartford and Owens, shared in the purchase price of each, the sum of $145,000 being paid for Miller, and $1,600,000 for Federal. The exhibits clearly show that the purpose in purchasing the Miller feeder rights without going through a patent fight was that Miller was selling machines outright, and this constituted a serious menace to Hartford's licensing and lease system. This is shown in a letter from H. W. Carter of Owens to W. H. Boshart of Owens, dated August 23, 1924 (Ex. 621):

"Miller sells his feeder installation outright for $5000.00, and where does this leave the royalty game? There cannot possibly be more than one answer unless Miller can be stopped by patents.

"It is fatuous to believe that glass manufacturers are going to continue to pay royalties in the face of competition which pays no royalty and yet has the use of such a successful feeder as Miller'."

The same was generally true of Federal, or Tucker, Reeves & Beatty. The feeders of this company were licensed and leased but at a much lower royalty rate than was charged by Hartford. In this transaction Hartford was interested both in adding more to its income from licenses and in eliminating a competitor. K. E. Peiler, an inventor and engineer for Hartford, wrote in June, 1922, that the Federal feeder was (Ex. 70):

"a serious competitor in the tumbler field and a menace in the bottle field. It has many possibilities of development, both as a distinct type of feeder and as an adjunct to other types of feeders."

On August 12, 1925, H. W. Carter of Owens wrote to W. H. Boshart of Owens (Ex. 1972):

"Tucker and Reeves are today in possession of a very practical and desirable form of feeder, which is the basis of a going business of sizable income and which feeder is of such a distinctly different type from those developed by Hartford and Owens in principles of construction and method of operation * * * If the Tucker and Reeves type of feeder is added to what we now have it would be a distinct asset to our feeder business and as an immediate and definite source of income."

Miscellaneous. Another part of the plan was a system of litigation against all remaining outsiders. Here the power of litigation pursued by a strong combination of two companies, one of which, Hartford, was dominated and partially owned by a third powerful company, Corning, backed by unlimited financial means, is brought into play against individual companies, most of them small manufacturers of glass products. Suits were brought against Hazel-Atlas, Kearns-Gorsuch, Lamb, Nivison-Weiskopf and Obear-Nester. The expense of this litigation was shared equally between Hartford and Owens, and this expense was by no means small. The record discloses that Hartford expended substantially $900,000 in the pursuit of litigation against so-called outsiders. The Hartford Company did most of the work, but Owens contributed a substantial part, and the patent lawyers of both companies were continually consulting each other with respect to both substance and procedure.

The litigation against Nivison-Weiskopf cleared itself up when the assets of that company were purchased by the General Glass Corporation, which company then sold its patent rights to Hartford and took a license.

The litigation with the Obear-Nester Company is still pending, several suits having been filed.

The litigation with Lamb ceased after Hartford had come to an agreement with Hazel-Atlas and the latter had taken a license from Hartford. Lamb then followed suit by taking a license.

Kearns-Gorsuch was a subsidiary of Hazel-Atlas and that litigation ended with the settlement with Hazel-Atlas in 1932.

In the meantime, in 1928, Hartford and Owens had purchased the Rankin feeder rights.

The Rankin feeder was controlled by a man named Pratt. He had decided to bring suit against Hartford when Owens

and Hartford purchased his rights for $63,500. The purpose of this acquisition is shown in a letter from F. Goodwin Smith of Hartford to W. H. Boshart of Owens, dated October 18, 1928 (Ex. 111):

"You and the rest of us want stabilization in the industry to be accomplished as soon as possible, and you and all of us admit that one step towards accomplishing stabilization is for us to have our patents adjudicated, and the infringers either brought in under a license or closed up. I therefore was strongly of the opinion that if Pratt himself or the purchaser of the Pratt patent and applications brought suit against this Company at this time it would go a long way towards negating the prestige which has come to us in winning the St. Louis suit.

"As I see it, Hartford cannot afford to be in a defensive position. It has assumed the offensive policy and must continue to do so."

Hazel-Atlas. We have seen how Owens and Hartford entered into a partnership agreement in 1924 for the purpose of obtaining a monopoly of all gob feeder rights, for the elimination of competition between the gob feed and the suction methods of manufacture, and for the stabilization of the industry. In 1932, a third partner was brought in, and from then on it was only a question of time until those purposes were achieved. The agreements between Owens, Hazel-Atlas and Hartford made thenceforth a three-way partnership, two of whom were the largest manufacturers in the glass container industry.

Hazel-Atlas had been fighting the Hartford gob patents for a number of years. It had obtained a suction license from Owens at an early date, as we have heretofore seen, but in later years it had been using the gob feed process to a large extent. While it was not much interested in the marketing of machinery, it was insisting upon its right to use the machinery which it manufactured.

Shortly after the completion of the agreement between Owens and Hartford in 1924, these two companies set about to license Hazel-Atlas. The purpose of this attempt was the strengthening of their patent situation and the further stabilization of the industry. However, the negotiations broke down and it was not until 1932 that an agreement was finally worked out.

In 1932, the patent situation between Hartford and Hazel-Atlas was coming to a head. Two suits had just been decided by different United States Circuit Courts of Appeal, one in favor of Hartford and one in favor of Hazel-Atlas. There was still the possibility of an appeal to the Supreme Court from the decision in the Third Circuit, which went against Hazel-Atlas, and Hazel-Atlas did contemplate this. Before that was accomplished, the parties reached an agreement.

The underlying reasons for entering into this agreement can be seen from a letter written by F. Goodwin Smith of Hartford to A. D. Falck of Corning, the latter being also a director of Hartford, in June, 1932 (Ex. 140). In this letter, F. Goodwin Smith explained that if no deal with Hazel-Atlas was made and the patent position of Hartford failed,

"1. O. will be affected as follows: • • •

"(b) Loss of opportunity to stabilize industry • • • O. considers stablization worth several hundred thousand dollars a year • • •

"2. Hartford will be affected as follows:

(a) • • • practical abandonment of licensing business.

"3. H-A will meet present and increased competition."

But if a deal was made and the patent position did not fail, the writer stated that,

"Hartford, Owens and Hazel-Atlas will have solidified industrial situation."

Exhibit 123 is a communication from H. L. Heintzelman, president of Monongah Glass Company, to F. Goodwin Smith, dated June 19, 1924, setting forth what occurred at a conference between the writer and certain officials of Owens:

"I explained that the amount of royalty paid was not so material so long as it was within reason, provided we had some way to get it back, but that my experience was that Hazel-Atlas was not inclined to get big prices for their product, and I enumerated a number of cases to illustrate this. I soon found out that they knew about as much regarding Hazel-Atlas' business methods as I did and that they

had been continually endeavoring to get them to change their policy, but that heretofore their representation on the Hazel-Atlas board did not mean anything, as Mr. Brady had been inclined to dominate the policy and had gotten away with it.

"Mr. Boshart informed me that he felt quite sure that Mr. Brady now realized his mistake in policy and that they were going to make an effort to change this policy. He further stated that it is absolutely necessary that they do so, because they had made no money last year, and the forepart of this year was equally as bad, and that they were in a position where they had to do something.

"Owens is now represented on the Hazel-Atlas board by Mr. Boshart and Mr. Biggers, and both of these gentlemen spoke very highly of the two members of the board recently put on.

"Mr. Boshart suggested that I get up a price list, have it printed, then, take the matter up with Hazel-Atlas, and the others concerned, and he felt that some good would come from it. I told him I would give this consideration."

Exhibit 644 is a communication from H. W. Carter of Owens to W. H. Boshart of Owens, dated May 4, 1925:

"In talking with Mr. Neave and Mr. Philbin, Mr. Belknap expressed great confidence in the outcome of our suit against Miller on the Lott patents. We urged that Hazel join with Owens and Hartford on the broad proposition that the true interests of the industry demand the building up, rather than the tearing down, of patent control, and that Hazel as one of the big figures in the industry, should be helping, rather than hindering, in this direction."

Exhibit 140 is a letter from F. Goodwin Smith of Hartford to A. D. Falck of Corning dated June 15, 1932. In speaking of the proposed Hazel-Atlas agreements, he said that if no deal was made with Hazel and the patent position failed, there would be

"Loss of opportunity to stabilize industry as far as present competition goes. O considers stablization worth several hundred thousand dollars a year."

Under the terms of the agreements worked out between the three companies, Hazel-Atlas contributed its patents

to the Hartford pool and received therefor the right to one-third of Hartford's income from royalties paid by Hartford's licensees over and above $850,000. Owen's participation in Hartford's income from royalties was likewise to be one-third thereafter instead of one-half as it had previously received. Hazel-Atlas was to pay standard royalties and was excluded from Corning's fields.

Owens' right to the free use of 40 feeder units was eliminated, as was the provision in the 1924 agreement that Owens was to share in Hartford's litigation expenses. From this time on, the combination and the conspiracy was merely enhanced by the presence of another large manufacturer who, up to that time, was the second largest manufacturer in the glass container industry. The ends desired were still the same, but from this time on there were three large hands to work out the program, instead of two. All three contributed whatever they could toward the common objective.

Results. Hazel-Atlas had been the leader of the opposition to Hartford until 1932. Hartford and Owens were particularly anxious to have Hazel-Atlas take a license because of the effect on the remainder of the industry. In other words, they thought that the remaining outsiders would fold up and become Hartford licensees as soon as they learned that Hazel-Atlas, their leader, had done so. It is also a fact, as established by the record, that with the advent of a favored licensee to the combination, the newcomer immediately put forth his utmost efforts toward inducing other concerns to likewise license themselves to Hartford. This was true immediately after Hazel-Atlas joined the combination in 1932. It was true after Ball Brothers had joined its interests with those of Hartford in 1933. In the case of Hazel-Atlas, it was advantageous to it to induce other concerns to pay royalty fees to Hartford because it, with Owens, was sharing in these royalty fees. It was advantageous to Ball Brothers to induce other concerns to accept licenses because it brought them under the restrictive licenses of Hartford, whereas it had an unlimited and residual license from Hartford.

What Hartford, Owens and Hazel-Atlas anticipated did shortly occur. Within a year all but seven manufacturers in the industry had taken licenses from Hartford, and three of these subsequently took licenses. Today only four so-called outsiders remain, to wit, Kerr, Obear-Nester, Reed and Jeannette. The latter is not in the container field but

manufactures more in the pressed and blown field. All of these companies, with the exception of Kerr, are being sued by Hartford.

The Conspiracy as Related to Suction Machines

There can be no doubt that one of the purposes of the 1924 agreement between Hartford and Owens and their relations thereafter was the elimination of competition between the gob feed process and the suction process. While it is not specifically stated in the agreement that Owens would thereafter have the exclusive use of the suction process in return for Hartford's exclusive use of the gob feed process, yet the negotiations preceding the signing of the agreement leaves no doubt that one of the primary purposes in entering into the agreement was to divide the industry into two branches, to wit, suction, to be controlled by Owens, and gob feed, to be controlled by Hartford. Furthermore, as a result of the elimination of competition in the gob feed process, the industry could be stabilized. It would, of course, be futile to eliminate competition in the gob feed process if competition between the suction and gob processes was to continue.

As early as February 15, 1922, F. Goodwin Smith wrote a memorandum (Ex. 20) in which he pointed out that,

"a feeder with forming machines represents a competing unit to the Owens Suction-fed automatic bottle machine."

Exhibit 35, a memorandum dated April 21, 1922, written by H. K. Smith of Hartford, reads in part as follows:

"5. Owens is not to go out and license its forms of gob feed in competition with the H-F feed. In principle H-F. is to be the gob feed concern and Owens the suction concern.

"6. H-F. shall restrict the issuance of further licenses in the container field in such manner, (to be defined more specifically later), as shall preserve the general principle of preventing over plant-investment and over-production, as well as keeping the licenses out of the hands of objectionable and irresponsible parties.

"In like manner, Owens shall restrict the licensing of its suction feed and all developments thereof in such a way as to maintain a similar position."

On April 22, 1922, the same author wrote to J. C. Blair of Owens as follows (Ex. 34):

"this arrangement will practically divide the industry, so far as our two companies are concerned, into two branches—the suction process branch controlled by Owens and the gob feed branch controlled by H-F."

On March 3, 1922, H. K. Smith wrote that (Ex. 30):

"Owens wants * * *

"(e) Control status of gob and suction feed in container field."

Exhibit 24, a memorandum by F. Goodwin Smith, dated January 24, 1922, says in part:

"I think it must be definitely assumed that the offer of Owens was based:

"(a) To prevent patent and commercial war between the two methods of manufacture—Suction Machines vs. Gob Fed Machines."

In a memorandum dated April 27, 1922 (Ex. 37), H. K. Smith wrote:

"That the commercial considerations, involved in considering either an agreement or a conflict between Owens and H-F, are of greater importance than the relative patent values controlled by the two companies. By 'commercial considerations' is meant the domination of outside feeders, the stabilization of the industry tending against irresponsible price-cutting; the general co-operation between the gob and suction processes for an orderly development of the two side by side, such as will be most beneficial to the interest of the two companies and to the industry; and finally the steadying influence that will be established in the machine side of the industry by a recognized co-operation between the two companies.

"That there is a broad field for the application of the gob process and that, broadly speaking, the two processes in the hands of friendly companies should be allowed to develop side by side and find their natural field and expansion."

In Exhibit 33, a memorandum by H. K. Smith written in 1922, he says:

"(1) We must keep it clearly in mind that this license plan in theory, at least, still leaves the two companies to go on independently, except so far as they join for the purpose of attacking outsiders.

"In theory this means that the gob and suction processes will be in direct competition, letting the best process win. This situation will raise several questions, as follows:

"(2) Owens will undoubtedly want some limits placed on our new single feeder. If we go out with it broadcast, Owens may also do the same with theirs, as they have threatened, and there will be a sharp competitive war in spite of the agreement. This might go so far as to be bad for both.

"(3) There is also involved in this general question, the question as to what is to be done with the outsiders when dominated. How many shall be allowed to survive and at what price?

"(4) It is almost certain that Owens will recognize these difficulties and will demand that some limits be placed both on our single feeder and on the gob feed outside. In other words, they will want to put some limits on any straight out fight between the gob and suction process.

"(5) If they do this, however, it is equally logical for us to demand that there be limits placed on the use of new forms of the suction feed. If it is not to be a free-for-all fight, then both sides must be limited equally."

Here is the spectacle of an officer—a secretary, general counsel and director of the Hartford company—discussing, in negotiations for an agreement with the largest manufacturer of glass products in the country, agreements or understandings that to him, as a lawyer, he must have known were in direct violation of the anti-trust laws. He says that there is involved "the question as to what is to be done with the outsiders when dominated." He says further, "How many shall be allowed to survive and at what price?" He says that Owens "will want to put some limits on any straight out fight between the gob and suction process." He says, "It is equally logical for us to demand that there be limits placed on the use of new forms of the suction feed.

If it is not to be a free-for-all fight, then both sides must be limited equally." I repeat that it is not necessary for a court in this case to resort to inferences from either circumstantial or direct evidence.

As stated above, the 1924 agreement does not specifically cover the suction process. The reason may be found in the testimony of K. E. Peiler of Hartford, at page 7095 of the record:

"Q. Well now, this much is clear: that you understood, as you just said, that Owens would take the suction field, and your company would take the gob field?

"A. Yes.

"Q. And you also understood, did you not, that they wouldn't do anything to injure your phase of the business, in entering the gob field business, and, of course, neither would you do anything to injure them in the suction field?

"A. Well, of course, I realized that once having made an agreement whereby we got the license, they couldn't touch us, and as far as suction was concerned, they were already established, and what little I had done in suction didn't amount to much, so we couldn't have touched them at the then stage of the game on suction."

However, shortly after the 1924 agreement, a question came up with respect to suction feeders, as distinguished from suction machines, in which the glass was raised into a gathering cup by suction, but the glass got into the molds as freely dropped mold charges. On May 12, 1926, R. D. Brown of Hartford wrote to F. Goodwin Smith of Hartford as follows (Ex. 1734):

"The developments now actively under way in Peiler's suction feeder and in O'Neill's suction feeder make it highly desirable that an understanding be had with Owens as to whether suction feeders are or are not 'licensed inventions' under the contract of April 9, 1924 * * *

"I recommend that an understanding with Owens on this question be arrived at before they have a chance to learn of the possibility of commercially exploiting our suction feeder."

In accordance with this letter, the matter was taken up between the two companies and settled with respect to this particular device. Hartford agreed that it was a licensed

invention and hence Owens would share in the income. Exhibits 249, 615.

In 1929, the officials of Hartford and Owens got together and determined which of their respective suction patents might be used against the O'Neill suction gathering machine. There was a possibility that some of the claims of each company would be put into interference with each other in the Patent Office, and to avoid the delay in attacking O'Neill a plan was worked out whereby Owens would drop its claims having subject matter interfering with Hartford's application. Exhibit 1880.

Later, in the same year, it was contemplated that in the acquisition of the O'Neill rights, Hartford would be entering into the suction field. Since suction was outside the 1924 agreement, Owens was not entitled to share in the income. Owens would not consent to this, and a special provision was contemplated whereby they would share in the income from this particular device. At that time, both companies realized that there was a possibility that Hartford could compete with Owens in suction. Exhibit 257.

Exhibit 252, a communication by H. K. Smith to F. Goodwin Smith, both of Hartford, dated July 30, 1929, reads in part as follows:

"The other important problem is the effect of this partnership with Owens on our mutual relations in the suction field. I have tried to leave us, and Owens, as free as possible in that field for the future, and still bring us together enough to protect the present and future O.S.M."—O'Neill Suction Machine—"as it may be fairly forecast."

Exhibit 253, a memorandum written by H. K. Smith of Hartford, dated July 30, 1929, entitled "Knox-O'Neill Summary", contains the following:

"The purchase contracts now outstanding call for (83) machines. These machines will be free of royalty and free of all restrictions on ware.

"This block is so large that it will certainly, if the machine is successful, cause a great disturbance in the industry; very serious friction with our licensees, and they *might* have the result of upsetting our present licensing system, on which the stability of the industry depends, and forcing us, also, to a straight sales policy * * *

"He"—Levis—"stated that he felt, off hand, favorably inclined toward the plan, but that he favored it more because of what it promised for the future relations of Hartford and Owens than because of the merits of this particular O'Neill matter. He said that it was his ideal that Hartford and Owens should enter into much closer relations; Hartford should be the sole controller and licensor of all patents, both gob feed and suction, or any other form developed by the two companies; should be the sole developing company; and that Owens should confine itself solely to manufacture. He also wanted to have Owens have preferential rates under all the combined group of inventions, and a share in all the income therefrom."

Here is the picture of the second member of this "partnership," Owens, making arrangements to confine its activities solely to manufacturing, giving to the first partner, Hartford, the control and licensing of all patents, both gob feed and suction, or any other form developed by the two companies, and agreeing that Hartford should then be the sole developing company. However, under this setup, Owens was to receive preferential rates over its competitors who were also to be licensees of Hartford; and, in addition, Owens was to have a share in all the income produced by royalties collected from its competitors. This, of course, had the effect of placing Owens in a position of decided advantage over all other manufacturers of glass products who produce the same lines of ware produced by Owens.

Exhibit 629, a communication from Garland Lufkin of Owens to H. W. Carter of Owens, dated October 12, 1929, reads in part as follows:

"I consequently agree with you that there is very little to be gained by us in continuing our present effort to conceive new ideas on feeder type machines.

"Instead, I think we should turn these efforts to suction type machines. The importance of doing this seems to be all the more vital in view of the following analysis:

"At the present time, there are quite a few manufacturers paying feeder royalties to Hartford who are successfully competing with us. This indicates at least a rough equality between Owens operating costs and feeder operating costs plus royalties.

"In a few years these manufacturers will be able to use feeders without royalties, so that we must accomplish sufficient reduction in our cost of Owens operation by that time to offset their present royalty charges, if we wish to remain even on an equal footing.

"We must, however, do better than that if we are to acquire the position in the industry for which we are aiming, and this would mean, among other things, that our Owens costs will have to be much lower than feeder costs.

"If this can be accomplished, it will demonstrate the superiority of the suction gathering process and will therefore attract many other manufacturers to this type of machine. Consequently, it is very necessary that we get all the patent protection possible on improvements in the suction field.

"Inasmuch as the Hartford-Empire Co. has no connection with us on suction inventions and since it is quite likely that their engineers have been given a lot of thought to this type of process, it would appear that some agreement with Hartford on inventions pertaining to this process, would be desirable. If such an agreement cannot be worked out, then it is of the more importance for us to concentrate our attention on this particular line."

In 1932, as a part of the agreements entered into between Hazel-Atlas, Hartford and Owens, the two latter companies did come to an agreement on suction rights. In this agreement, Hartford gave Owens an option to take up any suction rights that Hartford might develop.

Owens was getting a little apprehensive of Hartford entering the suction field with the possibility of producing a machine that would cut Owens off from its favored position. Early in 1932, Hartford wanted to get into the Owens plants to see some of Owens' suction developments, but Owens refused. Owens stated that it was very jealous of its suction field, even as against Hartford. H. W. Carter of Owens wrote to F. G. Smith of Hartford on January 29, 1932 as follows (Ex. 631):

"For you will readily see Goodwin, that the difficulties of our relationships in respect to this particular matter are inherent in our basic agreement. In recognizing your dominant interest in the feeder field, you will recall that we were very careful to insist on our own dominant position

in the suction field, and I do not think I am giving away any secret when I say that the interests which control this company, both those which were originally attached to the old Owens organization, and those which have come into control through the Illinois Glass merger, are still decidedly jealous of anything that looks towards an invasion of this field by others, including yourselves.

"And while there has been a certain relaxation of this attitude because of our common interest in discouraging O'Neill's incursion in this field, this department recognizes it is still the controlling view of our management.

"So much so that when on June 20, last, I made, at the suggestion of Mr. Hazelton, my guarded inquiry as to the rumor which had reached us to the effect that you were trying out a suction feeder, I reported to Mr. Levis as follows—

" 'Concerning Mr. Hazelton's report and the suggestion in that connection that we inquire of Hartford to what they are doing in their development of a suction feeder. Am doing this as per attached copy of letter to Goodwin Smith, but you will readily understandt that we are on delicate ground when it comes to suction improvements.

" 'For this necessarily implies an equally open attitude on our part, and I doubt if our management would care to disclose our plans in regard to the Soubier ram type development, for example.

" 'The trouble, of course, is that if we try to deal at all with Hartford in respect to the suction field, it is so difficult to draw the line between those suction devices in which we would be in partnership, so to speak, with Hartford, and those (like the new Soubier machine) in which we would wish to assert our exclusive control.' "

Shortly thereafter, the two companies entered into the agreement which gave Owens an option on all Hartford developments in suction. That Owens considered this worthwhile is evidenced by the fact that they conceded $750,000 for it. Exhibit 1778 is a memorandum by C. B. Belknap of Owens, dated June 6, 1932:

"For the 4th item we are asking a non-exclusive license under Hartford's suction inventions as defined in the contract submitted and inasmuch as these rights may not have any value in the future, or may be worth considerable, we have figured that the payment which amounts to around

$750,000 by our giving up the 4th item is a fair consideration for the non-exclusive license to Owens-Illinois and its subsidiaries, including Hazel and Ball, which we are asking * * * *

"In addition to the question of values there is this situation which makes it necessary for Owens-Illinois, from their standpoint, to get at least a non-exclusive license in the Hartford suction inventions, namely, that if Hartford develops a small suction machine which can displace considerable of the feeder licensing business, that the income from the feeder licenses will be cut down to where Owens-Illinois will be getting back nothing from the net income and will have to pay royalties on such feeders and formers as they use, whereas under the 1924 Agreement their requirements would be taken care of by the free feeder provision, and in addition they would have to pay royalties on the suction development, so that in place of a royalty-free manufacturing company, or one sharing in some of the income, they might easily come into the position where they received no income and paid royalties on all their production, and the Executives of the Owens-Illinois Company feel that when they are making this deal which puts them in that position with reference to feeders and formers, they should protect themselves to the extent of the suction rights above asked for."

Exhibit 141 is a memorandum by H. W. Carter of Owens, dated July 18, 1932:

"This option, added to our free license and release under all suction inventions owned or controlled by Hartford up to July 1, 1932, is believed to put this company in a commanding position with respect to suction developments and render it entirely unlikely that Hartford will branch out widely in the suction field * * * *

"Contracts 4 and 8, being separate Supplemental Agreement between Hartford-Empire Company and Owens-Illinois Glass Company, and between Hartford-Empire and Hazel-Atlas Glass Company, are designed to take care of the contingency that by some outside influence or decree, governmental or otherwise, Owens-Illoinois in the one case, or Hazel in the other, should be unintentionally deprived of its right to participate in Hartford's net."

Hartford, besides getting a good price for the option, was primarily concerned with keeping peace in the family. It realized that Owens would never license its suction machines or new developments in that field in competition with the gob feed. Exhibit 1883, a memorandum by K. E. Peiler, contains the following statement:

"I favor an agreement with Owens on suction developments for the purpose of keeping peace in the family, provided it is recognized that.

"We have no way of determining either present or future values of our suction developments."

Owens, however, was not satisfied. It obtained the suction rights of Lynch, including those that Lynch had obtained from the Ed Miller Mold & Machine Company as a part of the 1933 contract. It also obtained the assets of the O'Neill Company, thereby removing its principal threat in the suction field. Owens paid a considerable sum for this latter—$500,000.

With the accomplishment of these steps, Owens substantially rounded out its program for the control of all suction rights in this country. It then took up the question of the United States rights of certain foreign suction machines which could possibly compete with the Owens suction machine in this country. One of these, the Roirant machine, could be installed at a low cost and was sold outright at a comparatively low figure. Exhibit 746, a communication by C. B. Belknap of Owens to W. E. Levis, president of Owens, dated October 9, 1933, says:

"In the purchase of the O'Neill assets and the suction rights of Lynch (which includes those secured by Lynch from the Miller Machine & Mold Works), the company has substantially rounded out its program for protection in the U. S. of its suction machine rights. These acquisitions, together with the contract which we have to take over Hartford-Empire's suction machine developments, enables this company to proceed, for all practical purposes, with a free hand in its suction machine developments. Moreover, the patents which the company has developed and secured will protect its important developments from being duplicated by others.

"There is, however, the question of suction machines which have originated in Europe that needs to be con-

for them over a period of several years by Owens' development and improvement of its suction machines and by its securing immunity from other companies, so that it would not be disturbed in the enjoyment of its improved suction machines."

It is the contention of the Owens-Illinois Company that the suction machine is not desired because it is suitable only for certain types of ware and for long runs thereon, and because the original cost of installation is heavy. This, however, is an argument that the court cannot accept. Owens itself uses the suction machine for over 80% of its total production of glassware. It is true that Owens is the largest manufacturer of glassware in the industry, but there are other companies of considerable size and it does not seem plausible that Owens would be the only one capable of using the suction machine to advantage.

The Conspiracy as Related to Forming Machines

We have seen that it was Hartford's intention from the very beginning to obtain control of the gob feed art. In addition, it had the further purpose of making everyone in the industry apply to it for all glass making equipment. This embodied what the record frequently discloses was an ambition upon the part of W. E. Levis of the Owens-Illinois Company to establish a unit system, whereby the controlling company, Hartford, would be able, eventually, to supply a glass manufacturing concern with all the automatic machinery required for the manufacture of glass, to wit, the furnace, feeder, forming machine, stacker and lehr, all to be leased upon a single royalty basis. In this way, Hartford's grip on the industry would be stronger, its income from royalties greater, and its control of the industry perpetuated. The income of Owens, sharing in a division of the royalties received by Hartford, would be increased, and its goal of complete stabilization of the industry could be more readily and effectively maintained.

The next largest item of automatic equipment in the forwarding of this plan was the forming machine, a machine which contains the molds into which the feeder feeds the original gob of molten glass, and which then forms the gob into the desired bottle or container.

Hartford purchased the Sears and Lobb applications for forming machine patents in 1925. About the same time

that these applications were purchased, Hartford and Owens, acting jointly, took an option on the Headley & Thompson forming machine applications, paying a considerable sum of money therefor during the next several years, finally exercising the option in 1933. The Headley & Thompson forming machine devices were looked upon by Hartford and Owens as having claims which, if allowed by the Patent Office, might dominate all existing applications and patents relating to forming machines.

In May of 1933, Hartford acquired the forming machine rights of the Knox-O'Neill Company at a cost of an annuity to F. J. O'Neill of $10,000 per year for ten years.

During the same year, in August, an agreement was worked out with the Lynch Corporation, a defendant herein, which was engaged in the manufacture and sale of forming machines for narrow neck glassware under its own patents.

At the same time that this agreement was concluded between Hartford and Lynch, the Ed. Miller Company of Columbus, Ohio, which was engaged in the manufacture of forming machines for wide mouth glassware, together with all of its equipment and the patents that it claimed or possessed, was acquired by the Lynch Corporation through the contribution of $125,000 each by Hartford and Owens and the purchase of $200,000 of the Lynch stock with money supplied through W. E. Levis of Owens.

The consummation of these purchases and agreements substantially put an end to all opposition and competition in the glass forming machine business.

It is clear from the evidence that Hartford had the intention of extending its monopoly to include the entire chain of automatic equipment in the process of glass manufacture with the ultimate goal of obtaining a more complete domination of the industry.

It is equally clear that Owens, acting in accordance with its 1924 agreement with Hartford and its conduct and commitments during the years following, assisted Hartford in attaining its ambitions through equal financial contributions toward purchases, through the sharing of expenses of litigation, and through the operation and cooperation of their respective legal staffs. The positions occupied by the officers of each of these companies in the industry, as well as the financial strength of the companies, added imposing strength to the consummation of any proposed acquisition,

merger, litigation or agreements that the two companies essayed to accomplish.

The addition of Hazel-Atlas in 1932 to this combination of power added to the strength of these dominating companies and served to induce those glass manufacturing concerns that were still outside the influence of Hartford to apply for licenses without undue waste of time.

We will not turn to the exhibits which substantiate the foregoing conclusions. Exhibit 388 is a memorandum prepared by H. K. Smith of Hartford, dated February 18,1930. It reads in part as follows:

"Hartford has followed one definite policy, namely, that the future success of the Company could not rest on feeder income alone, but that the growth and asset position of the Company could only be insured by a development of methods and equipment applicable to the entire art of fabricating glass containers. Hartford has considered that the entire chain comprised the furnace link, the melting link, the feeding link, the forming link, the annealing link, with such auxiliary equipment as was applicable to each of these links, and that it would be a shortsighted policy to merely confine our efforts to the feeding link alone."

On July 15, 1924, F. Goodwin Smith stated the following with regard to the Headley & Thompson applications (Ex. 295):

"If some kind of control of Forming machines can be obtained, it will be a distinct advantage to us as a licensing company and will practically put us into a position where any bottle manufacturer will be forced to come to us for his equipment."

The Headley & Thompson applications were controlled by the Whitall-Tatum Company, and are sometimes referred to as the Whitall-Tatum applications.

Of course, Hartford and Owens, later joined by Hazel-Atlas, had the desire to obtain a monopoly of forming machine patents as a means of increasing income and control over the industry. This intention is shown by some of the exhibits. Exhibit 296 is a memorandum by H. W. Carter of Owens relating to the Headley & Thompson applications, dated July 22, 1924:

"As forming a possible basis for a considerable degree of control of the forming machine field, therefore, it would seem that these Headley & Thompson applications have a considerable value on the constructive side, in addition to their nuisance value, and this without admitting the extravagant claims for these applications by Headley & Thompson's attorneys. * * *

"The fact at least seems to be clear that if the forming machine field (as a whole, outside of the Owens suction machine developmen) is ever subjected to any considerable degree of patent control, it must be through these Headley & Thompson applications. There are no other patents apparently which afford any considerable promise in this direction. And under these circumstances, a broad patent policy would seem to dictate standing in with Headley & Thompson with a view to developing that control, if possible, rather than entering into a fight with them, which can only result in breaking down any possible control and throwing the field open to whatever extent the contest was successful.

"The only thing apparently now standing between the issue of the Headley & Thompson patents, with substantial claims, appears to be the opposition at present offered by Owens and Hartford, through pending and possible interferences. If this opposition were withdrawn, it is believed that these patents could be issued at a very early date, and with claims which would in all probability be greatly improved by the cooperation of our experts, and might prove controlling."

Exhibit 591 is a letter from V. M. Dorsey to F. Goodwin Smith, dated October 27, 1924, as follows:

"1. In the summer of 1922 while the fight with Owens was being vigorously prosecuted, it was suggested that the Hartford-Empire Company stood in danger arising out of the possibility that the Owens Company, if properly advised, might acquire control of the O'Neill and Lynch machines and thus obtain control of the only two then manufacturers who are putting out forming machines capable of use with our feeders.

"2. It was at least in part to avoid this possibility that we started the development of our own I. S. machine with

a hope that we would be in a position to put this machine on the market before the contingency above indicated arose. It was recognized then that in entering the former game we were not in as good a position as we were in the feeder game due to our late entry into the field and that our course might be made more or less difficult by patents belonging to our adversaries. * * *

"4. Possible issuance of the Headley & Thompson application will result in exactly what we were afraid of two years ago, namely, a control by some one else of formers suitable for use with our feeders.

"5. * * * b. Relieve us if the Whitall-Tatum claims by any chance are held dominant to cover formers necessary to be used with gob feeding, of being in a position to be forced to share the monopoly in gob feeding with Whitall-Tatum and with the resultant demand by Whitall-Tatum that in such event they obtain half or more of the profits of such game.

"c. Give us the benefit of profit from such monopoly as may result from the Headley & Thompson patent, both to increase our revenue and to strengthen our hold on the monopoly of the gob feeding game. * * *

"12. * * * I found however from Mr. Belknap that the Owens Company were more concerned in obtaining the benefit of any monopoly that might result from Headley & Thompson than in securing the right to continue the economical use of the gob feeders."

Under date of October 27, 1924, W. H. Honiss, R. D. Brown, R. F. Hatch and K. E. Peiler, all of Hartford, poined in a memorandum which reads in part as follows (Ex. 300):

"That our control of the feeder monopoly has not yet advanced to a point where we can expect to effectively hamper Whitall-Tatum's use of feeders in the immediate future. If our feeder control were prefected, we should recommend that no offer whatever be made to Whitall-Tatum. But until we have such feeder control, it is unsafe to dismiss lightly the chances, however slight, that Whitall-Tatum may obtain a strangle hold upon the forming-machine industry. * * *

"If, however, a deal can be made with Whitall-Tatum involving an expense to Hartford commensurate with what we would otherwise have to spend in fighting them, and if

such a deal gives us insurance against molestation by them during the next few years, together with a chance to share in any monopoly which, contrary to our expectations, Whitall-Tatum may obtain, then we recommend that such a deal be made."

On May 20, 1925, H. K. Smith wrote to L. T. Williams that W. J. Belknap, counsel for Owens (Ex. 1749):

"has suggested, I understand, for our consideration here, the possibility of some arrangement with the Miller Engineering Company and W. J. Miller, the Lynch Glass Machinery Company and the O'Neill Company. This arrangement would look to some sort of an elimination of the patent disputes, but mainly, I think, toward a combination into single control of the Miller, Lynch and O'Neill forming machine businesses."

Exhibit 304 is a memorandum from R. D. Brown to F. Goodwin Smith, both of Hartford, dated October 24, 1927:

"W. J. Belknap has proposed that we approach Lynch with the proposal that he withdraw from interference with Headley & Thompson, take a license at a reasonable royalty, and agree to put out his forming machines only with feeders supplied by Hartford.

"This would make it necessary to give Lynch something by way of consideration. Such consideration might be a payment of money or an agreement to furnish feeders with his machines, or both.

"*Advantages.* This scheme would seem off-hand to have the following advantages:

"1. Headley & Thompson's claims would be strengthened and the issue of the Headley & Thompson patents would be very much hastened.

"2. Hartford would have somewhat of a hold upon the narrow-neck forming machine situation, beyond what may possibly be obtained through the Headley & Thompson claims.

"3. Lynch would get the protection of the Headley & Thompson claims, and might be able to suppress competition."

In 1932, A. T. Safford of Hartford wrote to F. Goodwin Smith his reasons for continuing the option on Headley & Thompson (Ex. 1779):

"2. *Forming Machine 'Trust'*. Particularly in the minds of the Owens people there is a picture of a possible combination of all the forming machine interests. Regardless of what Hartford sees in this, it is a possibility and in case it took place the H & T applications would assume a necessary and important place. They would act as an effective club in making the deal probable, and would constitute a guise for making the combination lawful."

He further stated as a reason for the surrender of the option the "Anti-Trust danger—aggregation of too many patents and licenses." And he stated as a reason against the surrender of the option the "Value in event of Forming machine combination."

It appears that Owens in particular was not interested in patent values in making these forming machine deals. This is illustrated by a letter written by H. W. Carter to W. H. Boshart, both of Owens, dated September 10, 1925, referring to the purchase of the O'Neill forming machine business:

"On the contrary, the showing, as a whole, is rather against him, and leads us to believe that the decision as to the purchase, must rest on commercial (business) considerations, without much regard to questions of patent value. Insofar as we understand these considerations, we are inclined to favor the purchase, if it can safely be made."

Exhibit 1002 is a letter from F. Goodwin Smith to the Lynch Corporation, dated February 9, 1931, as follows:

"We feel that such a conference might readily lead to an arrangement which would not only favor the continuance of the friendly relations existing between your company and our company, but that a position might be created which would more fully protect us both against outside competition."

Exhibit 1750 is a letter dated June 16, 1933, from F. Goodwin Smith of Hartford to C. B. Belknap of Owens. It reads in part as follows:

"I want to have Bill Levis feel that we are seriously interested in the BIG program, that we will not procrastinate

about it, but I can see where it will be absolutely necessary for us to take more time than he will think necessary."

Exhibit 278 is a memorandum from R. D. Brown to F. Goodwin Smith, dated May 6, 1933, in which the writer reported a conversation he had had with C. B. Belknap, vice-president of Owens:

"C. B. Belknap tells me this morning that he talked with Levis about sharing the cost of purchasing the Headley & Thompson application.

"Mr. Levis is willing to share this expense with us provided the purchase constitutes a part of the general scheme which Mr. Levis has been discussing with you. I am not entirely clear whether this means merely the forming machine pool or includes the matter of unit royalty."

Exhibit 165 is a letter from F. Goodwin Smith to A. D. Falck of Corning, dated June 30, 1933, setting forth a statement made by W. E. Levis at a conference attended by the writer, Levis and J. H. McNash, president of Hazel-Atlas:

"Levis then made quite a dissertation on the Unit Plan which he thought could legitimately follow the acquisition of the Whitall-Tatum patents as well as some understanding with Lynch and the Miller Machine & Mold Works, and made four suggestions, as per the enclosed memorandum."

Exhibit H-6048 is a memorandum prepared by R. D. Brown of Hartford and directed to F. Goodwin Smith of Hartford relative to a conference held on July 8, 1933, with Lynch representatives, looking to an agreement with the latter company. He says in part the following:

"1. All parties agree that it is desirable to corner the forming machine business.

"2. The Lynch Corp. is willing to cooperate if they can get a reasonable break assuring them of a future volume of business.

"3. The Lynch Corp. does not consider a mere patent situation sufficient to justify holding down its business to Hartford licensees, because Lynch can fight patent interferences and suits for years, do business in the meantime, and hope that during the fighting period somebody will get up a feeder that is free of Hartford's patents.

"4. Lynch has made connections assuring financial support for future fights, both in the way of money support and a contribution of legal talent. Mr. Bridges added to this statement that Owens must also be in the deal so as to give Lynch the right to build their machine parts. The Lynch people prefer to have a straight license limiting the Lynch Corp. to selling machines to Hartford licensees rather than an arrangement by which they can sell to anyone, but must impose a production royalty on licensees who are not Hartford licensees. This arrangement is preferred on account of some deal they have with a concern not licensed by Hartford under which that concern is to have Lynch's best terms in the purchase of Lynch machines."

On July 17, 1933, A. T. Safford of Hartford, in commenting on the proposed agreement with Lynch, together with the purchase of the E. Miller Company by Lynch, stated (Ex. 320):

"Reasons for the plan are as follows:

"(1) It will prevent extra capacity being put into the glass industry.

"(2) Lynch being unwilling to furnish formers it will take away from them"—non-licensees—"the incentive to build feeders.

"(3) It will also have the effect of taking from other persons the incentive to build feeders that might be used with Lynch machines.

"(4) To deal with Lynch in this fashion may rid ourselves of a difficult situation with Levis. * * *

"(6) The former patent situation will be considerably stabilized."

Exhibit 319 is a memorandum, dated July 17, 1933, from the Hartford files, relating to the proposed deal with Owens. It reads in part as follows:

"As far as forming machines are concerned, a guarantee against new glass companies entering the field."

Exhibit HA-5085 is a letter written by W. E. Levis to J. H. McNash, dated July 27, 1933:

"I think that we have made progress in connection with the Miller, Lynch, Headley-Thompson situation, and as you

know, I am particularly anxious to get this matter converted into the so-called 'Unit Plan' before the extension of the Miller option expires in August. I think it is unreasonable for us to proceed to make the large payments that we have to make in the Miller-Lynch deal and for Hartford to spend the fund required for the acquisition of Headley-Thompson unless we have straightened out our differences with you that permit settling the remaining infringement cases with manufacturers who are not Hartford licensees."

In a communication from C. B. Belknap to W. E. Levis, vice-president and president, respectively, of Owens, dated October 9, 1933, is stated the following (Ex. 745):

"The forming machine situation in the U. S. has been very badly involved, owing to the overlapping patents of the Hartford-Empire Company, the Lynch Corporation, and the O'Neill Machine Company. • • •

"In order to round out the forming machine situation, the Lynch Corporation purchased the Miller Machine and Mold Works and also took a license from Hartford whereby the users of Hartford-Empire's feeder equipment could have the use of the Lynch and Miller forming machines without the payment of additional royalties. Such an arrangement not only removes the possibility of complicated litigation relating to forming machines, but it brings together into one hand the licensing of feeder and forming machines. I believe this straightening out of the forming machine situation is one of the most important advances made in the industry, and it is a long step towards a unit system of licensing whereby Hartford-Empire can furnish the manufacturer with a complete outfit from furnace to stacker at the cost of a single license fee."

Exhibit 278 is a communication by R. D. Brown to F. Goodwin Smith, both of Hartford, dated May 6, 1933, concerning the purchase of the Headley & Thompson applications:

"Mr. Levis is willing to share this expense with us provided the purchase constitutes a part of the general scheme which Mr. Levis has been discussing with you. I am not entirely clear whether this means merely the forming machine pool or includes the matter of unit royalty.

"If Owens joins in purchasing Headley & Thompson, they want to avoid contributing directly to the purchase, but prefer to arrange it somehow as we are arranging our contribution to the O'Neill purchase. C. B.'s suggestion is that they pay their half of the purchase price for whatever suction rights there may be in Headley & Thompson, or if this does not look plausible enough because there are no Headley & Thompson suction rights, then he suggests that Owens buy something or other in the way of suction from us."

Exhibit 745 was written by C. B. Belknap of Owens to W. E. Levis on October 9, 1933:

"Such an arrangement not only removes the possibility of complicated litigation relating to forming machines, but it brings together in one hand the licensing of feeding and forming machines."

Exhibit 1216 is a communication by E. W. McCallister, attorney for Ball Brothers, to that company, dated August 19, 1933, and has reference to the O'Neill Machine Company:

"From the foregoing you will see it is my opinion that Hartford-Empire Co. is trying to place itself in a position of collecting royalties on all apparatus used in a glass factory, and particularly in connection with feeders."

Exhibit 799 is an inter-office communication, dated September 25, 1933, by G. F. Rieman of the Anchor-Capstan Company, which reads in part as follows:

"Have enclosed copies of letters from Lynch Corporation and Hartford-Empire both on the same subject. The letters tell their own story and if H-E has something fundamental and enforceable, so as to tie the Lynch machines up with H-E feeders, it looks as if they will have a still greater hold on the industry than before. In fact, this would constitute as complete a monopoly as could be possible in an industry because there are no other substantial outfits to buy or license machinery from."

The agreements entered into between Hartford, Owens and Lynch, on August 23, 1933, provided that Hartford and Owens were each to pay $125,000 to Lynch. Lynch was to

purchase the assets of the Ed. Miller forming machine business in Columbus and needed $200,000 additional. This was supplied through the underwriting by W. E. Levis and Harry E. Collin of a sale of Lynch stock. Actually, the assets of the Miller Company were purchased by Lynch two days before the Hartford-Lynch agreement, to wit, on August 21, 1933. The Miller Company also owned some feeder rights and these were transferred to Hartford. Owens received an exclusive license on all Lynch suction inventions, probably including some received from the Ed. Miller Company.

Lynch granted Hartford a non-exclusive license to make and sell forming machines embodying Lynch inventions. Hartford granted Lynch a non-exclusive license to make and sell forming machines embodying Hartford inventions to any person or concern that had obtained from Hartford a license under Hartford forming machine inventions to use such forming machines. This, of course, meant that Lynch could sell no narrow neck forming machines that it manufactured to any person that had not obtained a license from Hartford to use such forming machines, because Lynch conceded that the Headley & Thompson applications covered their own—Lynch's—inventions, and Hartford now owned Headley & Thompson and had dominance over Lynch. The only possible forming machine that Lynch could make and sell without the necessity of a Hartford forming machine license was the wide mouth forming machine that it acquired the right to manufacture through the purchase of the Ed. Miller Company. The agreement also provided that Hartford was to pay Lynch $3000 per machine in excess of those having an aggregate production capacity greater than 40% of the production capacity of all forming machines delivered by both Hartford and Lynch.

The agreement is not specific as to whether Lynch had the right to sell forming machines for use with a feeder not licensed by Hartford, but the facts are that Lynch has never sold a forming machine since this agreement to be used with a feeder not licensed by Hartford, and Lynch so informed prospective customers.

The Lynch company adhered strictly to the agreement after its consummation. The record is full of instances where manufacturers of glassware, in applying to Lynch for forming machines, were forced first to obtain a license from Hartford. The purchaser was required by Hartford

to pay the same royalty rates on a forming machine as were charged on a feeder, except that if the licensee was already paying royalties on the feeder, then no forming machine royalty was charged.

The agreement of August 23, 1933, between Hartford and Lynch, and the conduct of the parties thereafter in living up to this agreement, was in violation of Section 3 of the Clayton Act, as well as a part of the general conspiracy in violation of the Sherman Act.

Assuming that manufacturing Company A, using its own feeders or the feeders of some independent manufacturer, desired to purchase a Lynch forming machine, and this appeared to be the only concern that a manufacturer could turn to for the purpose of purchasing a forming machine; then Company A would have to contract with Hartford for a feeder to operate with the forming machine. When it accepted a forming machine license from Hartford covering the Lynch forming machines, it had to use a Hartford feeder, or pay excessive royalties on the forming machine. This constituted the lease of a feeder machine on the condition that the lessee shall not use the feeders of a competitor of the lessor. Lynch, as a party to this agreement, was equally in violation of Section 3 of the Clayton Act. This entire procedure, involving the so-called "corner" of the forming machine business, when viewed in the light of the Anti-trust laws, is indefensible from any angle.

The Conspiracy as Related to Lehrs

We have seen how Hartford's goal was the control and domination of the entire link of automatic machinery used in the gob feed process, and we have covered the feeder and forming machine links. We now come to the third link—the annealing lehr. Sometime around 1925, the Hartford company began a system of licensing and leasing annealing lehrs under restrictive licenses in much the same manner that it had theretofore followed in the licensing and leasing of feeder machines. The Amsler-Morton Company had been engaged in manufacturing and selling annealing lehrs since the year 1915, and it developed as Hartford's chief competitor as the latter engaged more extensively in the business of manufacturing lehrs following 1925. In 1928, Hartford notified Amsler-Morton that it claimed an infringement of Hartford's patents to Lehrs. At a conference of the offi-

cials of both companies held in May 1928, Hartford suggested that the two companies get together, that the Amsler-Morton Company increase its prices charged for lehrs from $9500 to $13,500, and that Hartford would permit Amsler-Morton to build the lehrs if the difference, $4000 on each lehr, would be paid to Hartford. Record, page 2278-9.

The Amsler-Morton officials refused to enter into such an agreement. Early in 1934 H. E. Collin, a broker in Toledo and a director of Owens, paid a visit to the Amsler-Morton Company and there stated, according to the uncontradicted testimony of Geer of the Amsler-Morton Company (Record, page 2281):

"that he was a member of the company that combined the Owens Bottle Company and the Illinois Glass Company together, forming the Owens-Illinois Glass Company; and that he also was instrumental in combining his company—his company was—instrumental in combining the Lynch Glass Machinery, the Ed. Miller Company of Columbus, and the O'Neill Machine Company of Toledo.

"Mr. Collin suggested that we sell our glass business; he did not say to whom; but he made us an offer of $200,000 for the glass patents, and—well—to get out of the glass business."

A month or two later, Collin, accompanied by Frazier of Simplex Engineering Company, and B. F. Hazelton, Jr., a vice-president of Owens, paid another visit to the Amsler-Morton Company and suggested that the Amsler-Morton Company and the Simplex Engineering Company get together, and thereby put themselves in a position to build the Hartford lehrs.

Geer testified, Record pages 2286-7:

"Hazelton • • • said he was leaving: 'now, boys, we have made you a good proposition.' He said, 'If you take it, you are going to make some money.' He said, 'We will give you a month to think it over.' He said, 'But if you do not go on with us, you are going to be sued, and continue to be sued until you are out of business.' He said, 'It is our plan that nobody in the glass industry is going to be allowed to own one piece of equipment.'"

In June, 1934, Hartford sued a user of one of Amsler-Morton's lehrs, the Swindell Company, for infringement of

"Underwood"—Knox Company—"has come into the fold and I understand Universal and Lamb will follow."

Knox was brought into the fold under an extremely limited license whereby it was granted the right to make 75,000 gross of milk bottles annually. In this connection, it is interesting to refer to exhibit 246, a letter from F. Goodwin Smith to Amory Houghton, president of Corning and also a director of Hartford, in February, 1934, which reads as follows:

"The license we gave Knox on milk bottles was limited and was approved by Thatcher and Owens."

It appears that Thatcher, as a favored licensee following 1920, exerted a keen interest in limiting production of other licensees for the manufacture of milk bottles and in preventing other companies from obtaining a license to manufacture milk bottles.

Exhibit 1249 is a letter from F. Goodwin Smith, of Hartford, to H. C. Mandeville, of Thatcher, dated December 23, 1929, and reads in part as follows:

"This morning when I came to the office I found your letter of December 20th, and also a memorandum from the Accounting Department showing that the Buck Glass Company had exceeded their allotment of 52,000 gross.

"The Buck Glass Company have not obtained our permission to make this over-run, but I suppose they went ahead, feeling that we would not take any legal steps against them for a slight over-run."

To this Mandeville replied (Ex. 431):

"Many thanks for your letter of 23rd December in respect of the Buck Glass Company. Their allotment as I understand it, was 52,000 gross. Please tell me how much they have exceeded their allotment. If it is a small amount I do not want to bother about it, but if it is a large amount I would like to devise some method of holding it down because it is hurting."

Here is an interesting example of how tight the lines were drawn, through the license and lease system, on the licensees of Hartford, in order to effectuate almost a complete control, even in the minutest detail, over the operations of glass manufacturing concerns.

Thatcher exerted its influence to prevent the Three Rivers Company from securing a Hartford license for the manufacture of milk bottles; and it operated in conjunction with Hartford in keeping newcomers out of the milk bottle industry. Exhibits 1247, 434, 435, 444, 471.

Exhibit 246 is a letter from F. Goodwin Smith of Hartford to Amory Houghton of Corning, dated February 17, 1934, reading as follows:

"We admit that the purchase of the Peerless plant was an advantage to the industry and did relieve us of a troublesome situation. However, if Mandeville had not bought Peerless, Bill Levis would have bought Peerless and there would have been no claim on the part of Owens. * * *

"We have not been legally prohibited from licensing single feeders for milk bottles to anybody we saw fit, but during all these years we have protected Thatcher and Berney Bond and Buck by refusing to grant additional licenses for milks. This action on our part has stabilized the price situation and has been forth hundreds of thousands of dollars to Thatcher. It would have been a very simple thing for us to decentralize the production of milks throughout the country. * * *

"The only potential competitor which Mandeville now has who is not a licensee of Hartford, is Reed of Rochester, with a small yearly production of from twelve to fifteen thousand gross."

Reed is one of the four outsiders engaged in the manufacture of glassware that is now being sued by the Hartford-Empire Company.

Since 1935, Thatcher and Owens, as the leading manufacturers of milk bottles, Thatcher producing about 40% and Owens about 27%, have been in close cooperation. Substantial blocks of the stock of Thatcher were owned by the Illinois Glass Company until its recent dissolution. The latter company was owned and controlled by W. E. and R. H. Levis and members of their families. When W. H. Mandeville was elected to the board of Thatcher, he was requested by W. E. Levis "to represent our stock interest on the board and keep in contact with us regarding the situation, which he has agreed to do" (Ex. 834). W. H. Mandeville is still on the board of Thatcher.

From 1930 to 1938, Thatcher and Owens have manufactured from 65 to 70% of all milk bottles produced in the United States. All other producers of milk bottles, with the exception of the Reed Company, are licensees of Hartford.

This close control of the milk bottle production in the United States, and the methods employed in attending this control, due to agreements and understandings between Thatcher, Owens and Hartford, are clearly in violation of the anti-trust laws.

The Conspiracy as Related to Fruit Jars

In the early years when it was the policy of Owens to extend exclusive licenses for the use of its suction machine to certain manufacturers, it licensed Ball Brothers for the exclusive use of the machine in making domestic fruit jars. This license finally expired in 1933.

As early as 1926, Ball Brothers and Hartford entered into negotiations looking toward the license from the latter to Ball Brothers for the use of the Hartford feeder. Ball Brothers insisted throughout that it have an exclusive license, or as nearly so as Hartford could extend, for the manufacture of fruit jars, in pursuance of a policy established under its exclusive license in former years for the use of the Owens suction machine.

In a memorandum written by H. K. Smith of Hartford and entitled "Ball Brothers", dated March 30, 1926, he says (Ex. 172):

"1. The discussion was mainly on the matter of an *exclusive* license. They seemed more interested in excluding others than in using our machines * * *

"12. B says Owens practically promised to get them an exclusive on our feeders. We said we had never agreed to give B anything more than a non-exclusive and could not have done so, in view of our contracts."

In line with the aims of Ball Brothers to exclude others, as disclosed in the above memorandum, it is interesting to note from the record that in 1925 Ball Brothers paid upwards of $5,000,000 for the purchase of the Schram Glass Company, which engaged in the manufacture of fruit jars and owned certain glassware patents; that the Schram concern was the owner of three factories, and that since its

purchase none of these factories have ever been operated by Ball Brothers. In 1929, Ball purchased the fruit jar business of the Pine Glass Company for $872,400 and since that date this company's plant has been closed.

The record discloses that it was the ambition of Ball Brothers to become and remain as exclusive in the manufacture of fruit jars as it could possibly be made.

After the conclusion of the Hartford, Owens and Hazel-Atlas agreements of 1932, all of these companies were anxious that the Hartford company should license Ball Brothers and that the latter should accept a license from Hartford, Ball Brothers being the largest manufacturer of fruit jars in the United States. The royalties flowing from such a license to Hartford would be considerable and Owens and Hazel-Atlas would share in these royalties. Owens and Hazel-Atlas under their licenses from Hartford had fruit jar rights and hence could place themselves in a position of collecting royalties from their chief rival in the fruit jar businss, Ball Brothers, without the knowledge of the latter, and thus obtain a competitive advantages over that company.

Exhibit 783 is a letter from W. E. Levis of Owens to R. H. Levis of the Illinois Glass Company, dated August 2, 1932, and reads in part as follows:

"As I see the situation now, it appears that we are on the eve of straightening out the Hartford patent situation * * * The only important manufacturers who remain out of Hartford's licensing plan are Ball Brothers and the Root Glass Company. We are negotiating with both of these companies and I am quite confident that they will come in if all of the other feeder operators come in, if for no other reason than to protect fruit jar licensing, as well as to curtail the licensing of beverage bottle manufacturers."

Exhibit 181 is a letter from F. Goodwin Smith of Hartford to F. C. Ball, dated December 22, 1932, and in this the writer states that his company is continually declining new business in fruit jars in the belief that an association with Ball Brothers would be preferred, and he says,

"The easiest thing we could do would be to license Kerr, Brockway, Underwood, Monaca, and five or six more concerns in the East and South as well as on the Coast. Our troubles would then be at an end, for income would commence

to flow into Hartford, and every one in a while I am almost inclined to believe that this is what we should do.

"On the other hand, it seems rather a pity to disrupt the existing general fruit jar situation which, barring a few soft points, is pretty well in hand and affords a reasonable margin of profit."

Here is the owner of basic feeder patents who, with other patents on feeders that have been acquired, has complete control of the gob feeding process in the manufacture of glass, referring to turning down a flow of income by way of royalties through the licensing of a number of glass manufacturing concerns in order to keep the fruit jar business pretty well in hand, and afford to the licensees enjoying such a privilege a reasonable margin of profit. The reasonable rewards that a patentee might be entitled to, including royalties that may flow in as a result of a policy of licensing the use of machinery rather than an outright sale thereof, are scorned by the licensor so that restrictive licenses may be issued for the obvious purpose of extending and maintaing a control over an unpatented article produced on the patented machine.

At the time that negotiations were being pressed by Hartford, with the aid of Owens and Hazel-Atlas, to secure the acquiescence of Ball Brothers to the Hartford licensing system, Hartford had outstanding an unlimited license to the General Glass Corporation to manufacture fruit jars, and a limited license to Gayner. Owens and Hazel-Atlas had unlimited licenses and the Brockway and Knox companies were manufacturing fruit jars on unlicensed equipment.

In order to clear the path for a residual license to Ball Brothers and give that company the most that it lay within the power of Hartford to extend, steps were taken to limit the prospective competitors of Ball Brothers in the manufacture of fruit jars. Through the cooperation of W .E. Levis of Owens and J. H. McNash of Hazel-Atlas, General Glass surrendered its license to manufacture fruit jars for the sum of $100,000.

Under date of October 10, 1932, F. Goodwin Smith of Hartford wrote to I. J. Collins of General Glass Company in part as follows(Ex. 178):

"All negotiations, however, depend upon two factors,—first, that we will not license others on fruit jars for domestic

household trade, and second, that General Glass will cancel their right to make fruit jars for the domestic household trade. * * *

"I told them I thought you would be entirely willing to fulfill your promise to Messrs. Levis and McNash made at White Sulphur Springs, namely, that General Glass would cancel their right. * * *

"In talking with Will Levis this morning about the situation he told me that he was going to take the matter up with you by telephone as he felt it was most necessary that Ball Bros. become a licensee and that it would be suicidal to put up any barriers which would mean that Ball Bros. were on the outside and had to be dealt with in an unfriendly rather than a cooperative and friendly way. * * *

"As I see it the commercial considerations for the policies which we are trying to carry out are far more important than the question of a few rights here and a few rights there."

After the surender of the General Glass fruit jar rights, Ball Brothers took a license from Hartford.

Ball Brothers then proceeded to purchase the fruit jar business of Knox, the negotiations being had with R. Underwood of the Knox Company. Ball Brothers paid the sum of $100,000 to Knox and Hartford cancelled $44,000 of note obligations owing by Knox to Hartford.

Ball Brothers then purchased Brockway's fruit jar business for the sum of $54,000, and the latter company took a license from Hartford.

In the purchase of the fruit jar rights of both Knox and Brockway by Ball Brothers, these two companies were required in the agreements to remain out of the fruit jar business for a period of fifteen years.

Before Ball Brothers took its license from Hartford, there were considerable negotiations had between Hartford, Owens and Hazel-Atlas with Ball Brothers concerning the unlimited rights of Owens and Hazel-Atlas to make fruit jars under Hartford license. Ball Brothers insisted that Owens be limited to 100,000 gross annually and that Hazel-Atlas be limited to 300,000 gross annually. The record indicates that Ball Brothers were advised by their attorney that such an arrangement would be illegal, and it was thereupon decided that the written agreements would contain no such provisions.

The Government alleges that the parties had an oral agreement or understanding that Owens and Hazel-Atlas would not exceed 100,000 gross and 300,000 gross respectively during any one year. This is denied by the parties involved.

In exhibit 189, a letter from H. W. Carter to C. B. Belknap, both of Owens, dated February 1, 1933, the writer states that,

"we see no reason why there should be any amendment of our General License Agreement with Hartford, believing it would be more advisable to simply have a side agreement by which O-I agreed to limit its fruit jar production under its Hartford license 'if and when and so long as' the above mentioned conditions exist.

"Naturally, perhaps, this will raise the question as to whether the limitation so expressed would not be in contravention of the ainti-trust statutes, but on this point, Mr. Naylor suggests that the proposed side agreement make no mention of Ball Brothers, but that it simply be not signed up until as a simultaneous action with the signing up of the Ball license, and that it be phrased to continue so long as Hartford licensees make and pay royalty on a certain minimum gross of fruit jars yearly."

Exhibit 191 is a memorandum of a conference held in New York City on February 2, 3, and 4, 1933, between Hartford, Ball Brothers, Hazel-Atlas and Owens, and is prepared by J. H. McNash of the Hazel-Atlas Company. He says, in part,

"I told Mr. F. C. and G. A. Ball it was not necessary to have these modifications in the contract as far as I was concerned, if they, (Messrs. F. C. and G. A.), would permit me to tell my story to Mr. F. Goodwin Smith in their presence, inasmuch as he would have to be the umpire under the licensing arrangement, and for them to see whether my statement was correct or not.

"Mr. F. Goodwin Smith came into the room. I presented my story as outlined * * *

"Messrs. F. C. and G. A. Ball confirmed my understanding in Mr. F. Goodwin Smith's presence,—and I am asking Mr. F. Goodwin Smith to make a record of this, certify to it, to be in his files as a part of the atmosphere, at least of this Ball situation,—so that anyone following Mr. F. Good-

win Smith will know just how the situation is to be handled."

It is significant to note that prior to the year 1933 both Owens and Hazel-Atlas had at times exceeded the respective annual gross output of 100,000 and 300,000 and in some of the years they substantially exceeded these figures. Since the agreement between Ball Brothers and Hartford of March 25, 1933, and the licensing of the former company by the latter, the Owens Company has never exceeded an output of 100,000 gross of fruit jars in any one year save one when there was a very slight overplus, and the Hazel-Atlas Company has never exceeded an output of 300,000 gross of fruit jars in any one year.

All of this leads the court to the conclusion that, despite certain testimony in the record to the effect that no gentlemen's agreement exists for the limitation of the Owens and Hazel-Atlas companies, and that fear of the anti-trust laws restrained the parties from entering such a limitation in the written agreement, such an understandig does exist and is adhered to by the four companies involved in the entire transaction.

As a result of the early acquisition of the Schram and Pine Glass companies, the acquisition of the fruit jar business of Knox and Brockway, and the elimination of General in 1933, together with the limitations on fruit jar output on Owens and Hazel-Atlas, Ball Brothers has placed itself in a position of almost complete dominance in the manufacture of glass fruit jars and is left without any appreciable active competition.

The record shows that Ball Brothers produces over 54% of the fruit jar business of the country; that, while Owens and Hazel-Atlas had produced about 29% prior to 1933, since 1933 they have produced only about 20%; that substantially all of the balance, upwards of 20%, is produced by the Kerr Glass Company, one of the four manufacturing concerns in the United States that remain unlicensed by the Hartford-Empire Company. As previously pointed out, this situation is due to the fact that the Kerr Company manufactures through an old stream feed process on which the patents have expired.

The record is replete with instances, after the consummation of the 1933 agreement, wherein Ball Brothers complained to Hartford whenever it received information that some little manufacturing concern was cutting prices or

was manufacturing fruit jars or was behaving in some manner detrimental to the interests of Ball Brothers, and which the latter felt that the Hartford-Empire Company, through the sanctions of its licensing system, could ameliorate. The record also indicates the cooperative efforts of Hartford in an effort to eliminate these unfavorable conditions complained of by Ball Brothers.

These combinations and agreements eliminating competition in the fruit jar business and establishing the dominance of Ball Brothers in this particular phase of the industry through the use of the Hartford restrictive licensing system constructed on an unlawful conspiracy are contrary to the inhibitions of the anti-trust laws.

The Conspiracy as Related to Glass Container Association

Paragraph 170 of the complaint alleges that,

"In 1919 the defendant Glass Container Association was organized as a trade association for the glass-container industry for the purpose of compiling technical information, publicizing the industry, aiding in the improvement and quality of glass and influencing legislation for the industry • • • since 1928 it has been managed by Charles R. Stevenson • • • and Emory G. Ackerman."

Paragraph 172 of the complaint alleges that,

"Prior to 1928 the Association's activities were limited to the collection and dissemination of statistical data, and the issuance of advertising matter regarding the use of glass. Since 1928 the Association, under the active guidance and direction of defendants • • • Stevenson and Ackerman, has also been responsible for fixing production quotas for the industry, and the members thereof."

Paragraph 174 of the complaint alleges that,

"From time to time the Association, at the request of Hartford (not a member of the Association) and Owens, has dissuaded new firms from entering the glass-container industry."

Other charges are made against the Association, including a charge of joining in the conspiracy to fix prices in the glass container industry, which the court feels that it is unnecessary to discuss here.

The Association admits that it published production quotas to its members, but insists that this was done in cooperation with the NRA during its existence and that it merely continued the publication of those quotas after the discontinuance of NRA; that for some time past and since the complaint herein was filed, it has discontinued this practice of publication of quotas. The Association further denies that it participated in the alleged general conspiracy or that it has from time to time dissuaded new firms from entering the industry.

Since 1925, the record shows that the Association has maintained a so-called "Statistical Committee" (exhibit 1714), which is a committee composed of seven of the leading figures in the glass container industry, most of whom are officers of the defendant corporations.

The cooperative efforts of the Association under its present management, operating in conjunction with the officers of Hartford in pursuance of the policy of that company, have followed a plan of discouraging all newcomers from entering the industry and have been of considerable assistance to the officers of Hartford in maintaining its policy of refusing to admit newcomers to the industry.

At page 5058 of the record, E. G. Ackerman, of the Association, in testifying, said:

"I have heard Mr. Stevenson announce many times his theory of 'live and let live,' and that there was only so much business to be secured in the industry, and that should be divided among members in the industry on some kind of equitable basis, if they could all stay in the industry and exist."

In Exhibit 476, which is a letter from A. M. Pease of Hartford to Ackerman, dated January 14, 1933, we find the following:

"From time to time we have inquiries for equipment in connection with establishing new glass plants. Needless to say, due to the over-crowded condition existing in the industry today, we are reluctant, and, in fact, refuse to license new tonnage.

"It occurs to me that your Association is in a position to do some good work along the lines of discouraging new interests from entering the glass business * * *

"Generally speaking, we answer all inquiries for our equipment by telling them of the serious over-production, not only in actual operation but the potential production that is at this moment lying idle, and caution them, before they invest any money in the glass venture, to take the matter up with the Glass Container Association and get their views and statistics on the glass industry as it exists today."

Exhibit 477 is Ackerman's reply:

"I was very much interested in your letter telling me of your activity with regards to new bottle companies coming into the industry. Your thoughts tie in very closely with the thoughts we have had, and I have done a good deal of work during the last several years in an attempt to keep new plants out of the picture. I should be very glad to discuss with you the next time we get together so that our stories may fit together.

"I am enclosing a copy of a letter written a few days ago to a Charles I. Gause who apparently is attempting to revive the old factory out at Caney, Kansas. I should be very glad to have your comments on this letter, and any additional thoughts which you feel should be incorporated in a letter of this character."

At page- 5011-12 of the record, Ackerman testified as follows:

"Q. • • • Now isn't it a fact, Mr. Ackerman, that the Association had as one of its functions to discourage new glass companies from entering the industry?

"A. The industry was greatly over-capacitated working 50 or 60 per cent of its capacity up until 1936.

"Q. Can't you answer yes or no, whether it was one of the functions; I will ask you the reasons later?

"A. Yes. We attempted to give all newcomers the facts in the industry in hopes they would be discouraged in going into the industry."

And at pages 5027-8 of the record, he further testified:

"Q. As a matter of fact, you were interested in keeping people out of the industry, instead of being interested in people coming into the industry; is that not true?

"A. I don't know. That letter"—referring to exhibit 1373, a letter from Ackerman to Eldred of Hartford dated

June 1, 1933, having reference to a letter of inquiry from an applicant who was desirous of entering the industry—"would indicate that I was interested in keeping them out, because we already had too much production.

"Q. You were telling those interested——

"A. We did not need any more production.

"Q. I say, you were interested at all times in keeping them out, were you not?

"A. Yes, sir.

"Q. Then, in addition to the functions you have enumerated, you were interested in keeping people out of the industry?

"A. Yes, personally, I was. That was my job, to do anything that would be helpful to the industry."

And at page 5013 of the record, he testified:

"Q. But you say you never did discourage them?

"A. Wait a minute. I tried to define what we did. We tried to give the facts of the industry. The industry was overcapacitated. We did not need new production in the industry, and naturally I was trying to color those facts in a way they might be discouraged. That might be true. I do not think anyone can say I discouraged them other than relating to them the facts regarding the industry."

Exhibit 1377 is a letter from Ackerman to Roy Underwood, president of the Knox Company, dated February 5, 1934, as follows:

"I shall be interested in watching the procedure, however, and if there is any danger we shall immediately oppose it the same as we are opposing other new glass bottle operations."

Exhibits 503, 504 and 509 are letters from Ackerman to Pease of Hartford along the same general lines of cooperation in the exclusion of newcomers to the industry.

As late as August 20, 1937, evidence is found that the Association was pursuing this same course. Exhibit 510 is a letter of that date written by Ackerman to the Sandy Valley Grocery Company, and in testifying concerning this exhibit we find the following by Ackerman at pages 5038-5040 of the record:

"Q. But you attempted to discourage them, did you not?

"A. I don't know whether I could say exactly attempted; I should like to discourage them, because the facts were so gloomy that I could not see how they were anything else but discouraging. • • •

"Q. You told us in 1936 the situation improved in the Glass Industry?

"A. Yes, sir.

"Q. Yet in 1937 you paint a gloomy picture, do you not, to the Sandy Valley Grocery Company?

"A. The fruit jar picture was gloomy in 1937; and still is a gloomy picture."

It appears to me that this consistent course followed by the Glass Container Association, in cooperation with Hartford in pursuit of a policy that it had rigidly maintained through the years, was such cooperation in the general conspiracy to restrain trade and commerce unreasonably in the glass container industry as to merit the condemnation of the court. We will see in the next section that this was an important part of the program of stabilization.

The record bears out the contention of the Government that long prior to the inauguration of NRA the Association followed a course of sending to its members monthly statistical reports (exhibits 600-606), containing forecasts of production for the whole industry, as well as for the recipient of the report. This policy was inaugurated in 1928. Exhibit 667 is a letter from H. W. Carter of Owens to R. M. Eldred of Hartford, dated August 9, 1929, and reads in part as follows:

"Mr. Levis wishes it to be understood that this company welcomes any reasonable competition and is anxious to avoid placing or maintaining any obstacles in the way of legitimate glass manufacturers. He is, however, in hopes that the Laurens Company will not fail to recognize the somewhat demoralized state of the industry under present conditions and that with manufacturing capacity so far in excess of present demands, increases in operation are likely to work out disastrously if not kept within the reasonable bounds suggested by the Glass Container Association."

There can be no doubt that the members of the Association, comprising substantially all of the glass container

manufacturers in the United States, including, of course, the licensees of Hartford, paid heed to the quotas published for each of them by the Association.

Exhibit 432 is a letter by H. C. Mandeville, an officer and director of Thatcher and a member of the Glass Container Board of Directors and of the Statistical Committee of the Association, to F. Goodwin Smith of Hartford, referring to the Liberty Glass Company, dated December 30, 1929. It reads in part as follows:

"Second, he is already making more bottles than his forecast justified. He is over his forecast and we are under. Since 1926 there has been, roughly, a 12% growth, or about 4% per year, and in that year we have only grown about 4% while the others have grown 10%."

Exhibit 419 is a letter from A. M. Pease of Hartford to H. W. Carter of Owens, dated March 7, 1930. It reads in part as follows:

"The Buck Company works under the Association allotment as far as its milk bottles are concerned and I imagine it does as far as its other business is concerned."

Exhibit 261 is a memorandum dated December 29, 1930, by H. K. Smith of Hartford. It reads in part as follows:

"Mr. Hazelton says that Turner, Knox, and Salem have been trouble makers, producing above their normal quota
• • •
"• • • Owens and Thatcher are below their quotas."

Exhibit 809 is a communication written by G. F. Rieman of Capstan, dated July 3, 1935. Rieman was at that time and for some time previous had been a member of the Statistical Committee of the Association. It reads in part as follows:

"As the glass industry is organized, one of the important things we are buying is quota. Francis May has not come through with this exact figure, but we have enough information to know that their quota is very close to 2% as compared to Capstan about 3% and Salem about 3%. Their quota is almost large enough to operate their two furnaces at full capacity the year 'round. The reason for this is that in setting the quotas the 1 and 2 fur-

nace factories were given more than their share because it was the only way the quota arrangement could be made to work. Of course it is considerable of an advantage to have a quota which permits full capacity operation."

Under date of July 15, 1935, Rieman again write as follows (Ex. 811):

"It looks as if the Diamond Glass Company could be acquired, including whatever property it has, for a net price in the vicinity of $150,000 or $160,000 * * *

"The main thing we would be buying would be quota. The six major concerns control about 74% of the industry and since the quota system was in operation years before N. R. A. and since at the past meeting all of the major concerns were still in favor of maintaining it, it seems likely it will continue. However, before doing anything definite at Diamond we would of course make sure the major concerns would guarantee this quota to us if we buy the plant and dismantle it. Their quota amounts to 0.7% (as compared to Capstan-Salem 6.0%) and would be about $600,000."

Exhibit 810 is another letter by Rieman, dated October 21, 1935:

"We were all agreed that the additional quota would be very valuable but more than this, the elimination of this competition which would mainly affect Salem might easily be worth $100,000 or more a year to Salem * * * We could safely afford to offer them as high as $150,000, in fact, it is conservative to estimate that it would be worth $200,000 to eliminate them from the field. In other words, $200,000 in preferred stock would amount to $13,000 per year in dividends and certainly we could easily earn many times this amount with the additional quota, as well as removing the hazard of a price cutter right in the Salem territory."

Exhibit 793 is a letter from W. D. Dugan of Olean Glass Company, to R. W. Niver, president of Thatcher, dated June 1, 1936, reading as follows:

"It seems strange that they can't get service out of General Glass when General Glass, according to statistics, is around two to three hundred gross behind their quota."

The quotas thus established and mailed to each of the members of the Association were made available to each of the other members of the Association, as follows (from the testimony of Ackerman, page 5176 of the record):

"Q. • • • Now at that time, in 1931, what if anything was the practice of the Association as to giving out information of this kind through the statistical group?

"A. As I recall, sir, prior to the date of this, or approximately that date, members of the Statistical Committee, at their meetings would pass around to each other their individual figures. After that had gone on for several meetings they asked us if we would not read their individual figures before the Committee, and with everyone's consent at the meeting we did read the figures of the individual companies • • • (P. 5178) As I recall it, that continued on until about 1937. At that time the statistical group, or someone in the group, said instead of reading the figures to us why don't you make up a copy of the figures, and from 1937 on until July of 1939, as I recall it, we put the statistical figures—I meant the figures for the Statistical Committee, or others who were at the meeting with the Statistical Committee, on a sheet of paper and distributed that sheet to everyone at the meeting."

At page 2516-7 of the record we find the following questions and answers in the examination of Dugan, of Olean:

"Q. Who gave you the information with reference to the quota after the NRA days?

"A. That information was given out at different meetings.

"Q. Whose meetings?

"A. The Glass Container meetings.

"Q. At the Association meetings?

"A. That is right.

"Q. Well, at the Association meetings you received the quota of each glass manufacturer, is that right?

"A. That is right.

"Q. And the Glass Container Association, in addition to giving you that quota at the various meetings, in their reports would indicate the quota of each glass manufacturer?

"A. All those glass manufacturers that were present at that meeting.

"Q. You are a member of the Association, of course?
"A. Yes, sir."

The composition and the operation of the so-called Statistical Committee of the Glass Container Association have been a source of great evil in the assistance and cooperation that they have afforded to the leading defendants in this case in their efforts to dominate, control and stabilize the industry.

It will be noted that, in general, only the leading officers of the large defendant companies comprised the membership of this committee. The Owens-Illinois Company, the largest producer of glass containers in the United States, was represented by William E. Levis; the Hazel-Atlas Company, the second largest producer, was represented by J. H. McNash; and the Anchor Hocking Company, the third largest producer, was represented by I. J. Collins. These three gentlemen were all respectively the presidents of their companies. Ball Brothers was represented by G. A. Ball. Thatcher was represented by H. C. Mandeville.

In the light of the close control that the Hartford company maintains over its licensees by virtue of its system of lease, license and royalty for the use of its machinery on license contracts extending for no more than eight of ten years each, and in view of the cooperation afforded the Hartford company in the maintenance of domination and control over the industry by the defendant corporations herein, as well as the active part played in the matter by the leading officers of these corporations who were also members of the Statistical Committee of the Glass Container Association, the power of this committee and its effect upon the small individual members of the Association may well be imagined, especially when quotas were produced in the monthly meeting.

The Statistical Committee appears to have been a breeding ground for hatching many of the conspiracies that were involved within the general conspiracy of dominance and control over the glass container industry. This activity of the committee members, and perhaps the activity of the committee at the regular meetings of the association where its presence might impose the sanctions, so aptly referred to by Justice Clarke in the case of American Column and Lumber Company v. United States, 257 U. S. 377, made this

arm of the Association a most vital one in the over-all plan of control of the glass container industry.

It is claimed by the Association that it discontinued its quota system sometime in 1939, but, however that may be, the court feels that the power of this association within the industry, exerted as it has been in the past, or held as a potential power that may be exercised in the future, makes it necessary to adopt measures of relief in the general plan to free the industry and establish competition. This will appear more clearly from a reading of the next section of this opinion.

Stabilization of the Industry

We have seen that one of the fundamental purposes in the relationship between Hartford and Owens was the stabilization of the industry. This is a broad term and, of course, would mean a perfectly proper and legal procedure. Some thirty-one pages of the defendant Owens' brief is devoted to a discussion of the meaning of the word "stabilization." On page 224 of that brief we find the following statement:

"The correspondence of the parties in this case produced by the plaintiff, in which there are references to stabilization or efforts to stabilize proves nothing except that those in the glass industry were facing the same problems and speaking the same language, as everyone else in industry. The general literature is filled with the discussion of stabilizing everything from the baby's breakfast to prosperity."

There is contained therein a lengthy discussion on the general use of the word "stabilization," an argument on the court references to stability, on "governmental recognition of stability and the necessity for it," and some comment on the testimony in the case regarding stabilization.

The court is interested not so much in the manner in which the word was applied in other times and under other conditions, nor how it was meant to be used by persons in other times and under other conditions. He is interested in the manner in which it was used by those defendants, chief officers and representatives of the defendant corporations herein, who made use of it in the course of their operations and during the time it is alleged that this conspiracy covered. The court is also interested in determining, from the language used and the conditions under which the word

was used, what the chief actors in the history covered by this case meant when they used the word "stabilization."

The word "stabilization" may be used as descriptive of many conditions and it may be used to described various situations, as the defendant Owens has ably demonstrated in its brief. However, the court is interested in the obvious or reasonable interpretation of a meaning sought to be conveyed by a defendant herein when he used the word "stabilize" or "stabilization" in the contemporaneous exhibits that form a part of the record. What meaning did the user extend to the word when he employed it in an exhibit herein?

It appears from the record that the word was used to cover the elimination of price-cutters, the establishment of uniform and high prices, the division of fields or lines of ware, and the division of the market by means of a quota system, each manufacturer to stay reasonably close to his apportioned quota of the sales of each kind of glass product, as well as the control of production through the power to refuse, and the refusal to license new companies.

The ultimate goal of stabilization, as that term was used herein, appears to have been a quieting and levelling off of competition for the ultimate purpose of attaining price stability in a price structure that would be highly remunerative to the parties concerned.

Exhibit 26 is a memorandum written by H. K. Smith of Hartford, dated January 17, 1922. He wrote that J. C. Blair of Owens had stated at a conference that,

"there should be in the glass industry some concern like Owens in a sufficiently strong position practically to force a stable price policy upon all important producers; that if Owens, by the plan above suggested, had the free use of its own suction feed and the free use of the gob feed it could then go to any other producer who threatened to cut prices and unstabilize the market, and inform him that such a policy was detrimental, but that if the outsider persisted in doing so Owens had a sufficient margin, by reason of its free use of both devices, so that if necessary it could come out on top in a price war and still make money. He felt that some such stabilizing influence was necessary and that it could only be established through one company having such a peculiar strength as would be given in this case."

The record clearly indicates that Owens, as well as all the other licensees of Hartford, continually complained of price-cutting and requested that Hartford sue all price-cutters as soon as possible. Hartford, on the other hand, as the driver in the seat with a whip in hand, was not at all reluctant or slow in applying the whip whenever price-cutters were reported to it through the medium of its licensees.

Exhibit 626 is a memorandum of a conference on feeder litigation dated April 6, 1926:

"We understand that our milk bottle licensees would welcome a suit against Lamb as tending to put an end to Lamb's price-cutting policy. • • •

"*Nivison-Weiskopf.* Mr. Carter strongly urges suing Nivison-Weiskopf both on account of their price-cutting and on account of the fact that they are manufacturers of feeders as well as users."

Exhibit 583 is a communication from H. W. Carter, of Owens' Patent and License Department, to F. Goodwin Smith of Hartford, dated December 31, 1929:

"In his outlook on the license situation, Mr. Levis is inclined to take a pretty broad view, as in the case of Three Rivers and Hemingray.

"It is therefore particularly unfortunate that we should be confronted immediately upon the enlargement of these licenses with actions of a most demoralizing character on the part of the licensee. We have already discussed this in the case of Three Rivers, and now our Sales Department is very much upset over Hemingray's recent actions.

"We have not informed that department of the broadening of Hemingray's rights, so they know nothing whatever of the situation except as they meet it in the field. In other words it is not a case of expecting trouble and then finding what is expected.

"Hemingray's salesmen, it seems, are already approaching our beverage customers with offers of severe cuts and with the statement that their license rights have been enlarged so that they are now planning to produce 600,000 gross of beverage this year as against 300,000 last."

Exhibit 1853 is a memorandum by W. E. Levis directed to the Owens Board of Directors at a meeting on July 10, 1930:

"Price Lists—The new price lists which went into effect on June 1st are being maintained by us in all lines, and a number of others in the industry have evidenced their appreciation of a stabilized market by following our lead. There are, however, a number of factors who are cutting prices to new low levels. Most conspicuous among these are Salem, Knox and to a lesser degree, Whitall-Tatum. Turner's policy is also rather weak. There is only a very limited amount of large bottle business which comes up for replacement at this season of the year. A true test of our ability to stand at present prices will come in the Fall.

"Generally speaking, the trade has received our effort to create a more stable and equitable market in a most favorable way."

Exhibit 776 is a communication from J. H. McNash of the Hazel-Atlas to W. E. Levis, dated December 31, 1931:

"On the third page of this list is a classification of Emerald Green Ointment Jars. In my judgment this is directly competitive with our opal Ointment Jars. Evidently your sales department has the same thing in mind, —for on the last page of this same price list, last paragraph, under special notice—the observation is made that the price is no more than for opal ware.

"This is just one more step in a direction against a policy that I believe we both appreciate,—and that is, that it is to the benefit of our respective companies to respect each other's special lines.

"Having this same thing in mind, I believe we discussed in Toledo in November, the matter of glass brick and other items of manufacture, in rather a general way; and I believe on our way to luncheon in your car, I mentioned the matter of your decorated and colored glassware in connection with our business in the cosmetic field. So far we have not been able to detect any change in the policy of your sales department in connection with this type of ware."

On January 13, 1932, W. H. Curtiss of Corning wrote to Amory Houghton of Corning as follows (Ex. 1545):

"Instead of setting up positive price control, provide for conducting business under license without unfair competi-

tion, unjust trade practices, etc. and provide for arbitration • • •

"When it is determined just how far we can go *legally* in imposing restrictions on a feeder licensee, review the advantages and disadvantages to Corning in granting the license."

In a letter from the Macbeth Company to I. J. Collins of the Hocking Company, dated October 21, 1932, we find the following (Ex. 1151):

"Upon rereading my letter to you of October 20th, with reference to license to manufacture the Marsden shape tumbler, I wish to correct an impression that might be formed—that it is our desire that paste mould tumblers and iron mould tumblers be sold at the same selling price. We feel that paste mould tumblers should be sold at a higher price, but in the absence of any data regarding the competition, that either party may receive in the paste mould field, it is impossible to set up a separate schedule at this time for paste mould tumblers."

Exhibit 588 is a communication from J. M. Beatty of Federal to F. Goodwin Smith, dated January 11, 1933, reading as follows:

"The latest cause for writing is the fact that the Tygart Valley Glass Company of Washington, Pa., who are pirates in a sense, have gone out to users of their product and ours, and whom Hazel, Capstan and ourselves are selling, and have made ridiculously low prices on wide mouth jars to the packing trade. • • •

"The Fairmount Glass Company also indulges in similar practices, and as I understand it, both of these concerns are operating machinery that, in view of what has transpired, would be considered an infringement on your patents. • • •

"I am in no position to dictate your policy, but I do think that immediate action should be taken by you to notify both of these companies, and particularly the Tygart, that you consider them as infringers of your patents, and to bring such pressure to bear on them that you can either take them in on some sort of a basis that will be satisfactory to you, as well as the others interested, or if you deem it advisable, to eliminate them entirely.

"In any event, no matter what your action may result in, I think it is due to your other licensees that you should take immediate steps to stop this killing competition. I have discussed this matter with the Capstan and the Hazel people both, and they are in thorough accord with my views, although Hazel is very desirous that they should not appear in any complaint in reference to the Tygart Valley people, due to their personal acquaintance with Mr. Stewart, and also due to the fact that he is a stockholder in their organization."

Exhibition 1360 is a communication from R. S. Davis, president of Universal, to R. M. Eldred of Hartford, dated March 27, 1933:

"Will you please advise what progress you are making with the Peerless Glass Company at Long Island, N. Y. The writer has just returned from an extended absence and found numerous complaints from our New York representative that the Peerless Glass Company are quoting prices independently and are not observing established practices in the industry.

"We trust that with your influences and with the protection of your glass patents, you can get this concern to adopt your feeders and cooperate with the rest of the industry."

Exhibit 954 is a communication from R. J. Miedel to J. H. McNash, both of Hazel-Atlas, dated September 11, 1933, reading as follows:

"It seems to me we should not allow the Maywood Glass Company to expand in feeders. It is a price-cutting house, and they have caused a lot of complications in certain fields. I hope my decision on this proposition will be acceptable to you."

Exhibit 956 is another communication from Miedel to McNash dated September 16, 1933, reading as follows:

"It seems to me that when people like the Maywood Glass Company take up with the Hartford-Empire Company about the extension of licenses, that Hartford should certainly not write them and tell them they are referring it to the glass companies for decision; that is what they did in this case. This makes a lot of hard feeling among the

competition. If Hartford wants our views, we should certainly give them to them, and then it is up to Hartford to notify their clients one way or the other.

"As it now stands, due to the way in which this has been handled, we are having trouble with Maywood about maintaining prices, with the up-shot that we have told them where to go to."

Exhibit 1752 is a communication from R. D. Brown of Hartford to Amory Houghton of Corning, regarding the McKee Glass Company, dated December 26, 1934:

"McKee to agree to maintain prices as provided in the existing Corning-McKee contract. (note: This would probably have to be done by a 'gentleman's agreement', if, as I assume, the McKee Company is not to be allowed to make any heat-resisting glasses on which there will be patents after 1936.)"

Here is some rather notable authority for the assertion by the Government that "gentlemen's agreements" in the industry are not unknown.

Exhibit 1753 is a letter from W. H. Curtiss of Corning to R. D. Brown of Hartford, regarding the McKee Glass Company, dated January 2, 1935, reading as follows:

"It has never been clearly established as to just how far we can go in price control in the licensing of patented machinery to make unpatented articles. In any event, we know from many years experience with McKee that their ideas and ours on prices are very far apart, and there is constant difficulty under the two licenses that Corning has granted McKee in keeping that company in line on the provisions of the license, particularly with regard to prices and terms of sale."

Exhibit 810 is an interoffice communication by G. F. Rieman of Capstan, dated October 21, 1935:

"We were all agreed that the additional quota would be very valuable but more than this, the elimination of this competition which would mainly affect Salem might easily be worth $100,000 or more a year to Salem. As you know, I offered them $75,000 in stock with the possibility that this might be increased to $100,000, depending upon our negotiations with Hartford-Empire. (The other conditions were

as we discussed; they to assume all current liabilities and get the proceeds from the sale of all stock, etc.) We could safely afford to offer them as high as $150,000, in fact, it is conservative to estimate that it would be worth $200,000 to eliminate them from the field. In other words, $200,000 in preferred stock would amount to $13,000 per year in dividends and certainly we could easily earn many times this amount with the additional quota, as well as removing the hazard of a price cutter right in the Salem territory."

Exhibit 959 is a communication from R. J. Miedel of Hazel-Atlas to J. H. McNash of the same company, dated March 28, 1936:

"I am pretty well burnt up about this proposition, because we have kept more or less a small position in liquor bottles, beers and wines, figuring that it was their field, and we would continue to grow in the wide mouth field, but as Hartford Empire has put two price-cutting outfits in position to cut our prices on lines in which we are vitally interested, I feel rather badly about it."

Another point in the program for stability of the industry was the division of fields and the restriction of production to certain specific lines of ware.

The practice of licensing companies for only certain specific lines of ware was followed by Owens in the licensing of its suction machine in the early history of the industry. It is Owens' contention that it did not initiate this practice, but that there had been a division of lines before the advent of the suction machine. This division was due to the fact that in the hand blowing and semi-automatic processes, the procedure of manufacture with respect to each item produced was entirely different and it was difficult for a manufacturer to spread all over the field. This was undoubtedly true before the Owens machine appeared. It was not true after that machine was put into use and after the gob feeder appeared. It is undoubtedly true that with the advent of automatic machinery, particularly the gob feeder, it was no longer impossible for a manufacturer to produce many more lines of ware than formerly. One need only to look at the present-day production of the Owens Company itself, which is extremely diversified, to substantiate this; so that while Owens may have granted licenses in the

lines formerly produced by its licensees, nevertheless it did prohibit them from branching out in the future, whether or not that would have been feasible with the suction machine.

The Hartford Company followed this same procedure. It realized that it could not charge as uniformly high rates under a system of unrestricted licenses as it could with restricted licenses. Competition among the manufacturers would be too sharp. Consequently, Hartford never licensed except on a restricted basis whereby it retained complete control over the actions of its licensees.

This meant, of course, that Hartford and Owens were the final arbiters of who should produce what and how much. In this way the industry was stabilized and competition reduced to a minimum. This was particularly vicious when it is remembered that Hartford had to secure Owens' consent in granting new licenses. Owens was a large and diversified manufacturer and yet could determine who was to manufacture in competition with it. If Owens did not want a manufacturer to produce a certain line of ware that Owens was producing, all it had to do was refuse to give its consent to the license.

Hartford consulted other of its favored licensees with respect to the granting of licenses in certain lines of ware. Particularly, it consulted Thatcher with respect to granting licenses to make milk bottles, and Ball Brothers with respect to granting licenses for fruit jars. Of course, after Ball Brothers purchased the residual rights of Hartford in fruit jars, Hartford no longer had the right to grant further licenses in that field. Ball thereafter continually complained of any other manufacturer producing one single fruit jar. It even complained continually of certain manufacturers permitting packers ware to find its way into the domestic fruit jar trade. When this occurred, Hartford would warn the manufacturer to see to it that its ware did not find its way into the domestic fruit jar trade.

Exhibit 395 is a lengthy memorandum by H. K. Smith of Hartford, dated March 26, 1928, and entitled "Memorandum as to Hartford-Fairmont and Hartford-Empire History and Policy." It reads in part as follows:

"(2) Our process had one important rival—the Owens Bottle Company—the most powerful glass concern in the world. Its process was entirely different from ours. It

came into commercial use about 1905 and dominated the industry until about 1917 when our process began to get a foothold. Up to 1924 there was sharp conflict between us and Owens, with some patent litigation. In 1924, after long negotiation, the two companies got together in a cross-licensing arrangement and have since then worked in exceptionally close understanding. There is, however, no combination between the two.

"(3) We began our commercial expansion in 1917 when our first feeders were put into production. It was at once apparent that if we put out these machines broadcast, without restriction, we would disorganize the whole industry which was then divided into a large number of small units and most of these manufacturers would not be able to refrain from using practically all the savings produced by these machines in fighting with each other. In fact, our first group of licensees said so expressly and urged us to take measures to prevent such a result.

"(4) Consequently we adopted the policy which we have followed ever since of restricted licensing. That is to say,

"(a) We licensed the machines only to selected manufacturers of the better type, refusing many licensees whom we thought would be price-cutters, and

"(c) In order to retain more complete control of the situation, we retained title to the machines, and simply leased them for a definite period of years, usually 8 or 10 years, with the privilege of renewal of a smaller additional term."

It will be noted that among the reasons above assigned for adopting a policy of restricted licensing, we find no reason assigned to the effect that the Hartford Company was following that policy for the purpose of obtaining such reasonable reward as may accrue to a patentee or a licensor by virtue of his patent monopoly. The memorandum continues:

"(5) In specifying the various fields of ware for a given licensee, we have with a few exceptions, based the classification upon the use of the article rather than shape or other physical characteristic. Glass containers have so many shapes that it is practically impossible to classify them by shape and very often numerous different shapes will be used

for the same purpose, so that use of the container is the basis for our classification except in a few cases.

"(6) Quite early in our history we foresaw that the glass industry, like others, would doubtless go through a process of combination, which as a matter of fact has occurred. We felt it to be to our best interest, as well as for the best interest of the whole industry that we should use our influence to steady the industry as much as possible, with a long-distance view towards its general prosperity. The men at the head of our concern took this long-distance view deliberately and have ever since maintained it. For example, although the Hartford-Fairmont Company was organized in 1912, it paid its first dividend on its common stock in 1924. Up to that time it had put back into development all of its profits and considerable amount of cash received from sale of patents abroad.

"(7) We have thus gradually evolved the theory of what may be called a 'glass equipment concern'. In this change of the industry to mechanical equipment, two courses were theoretically possible for the manufacturer—

"(a) He might at his own expense develop automatic machinery and protect the same by patents for his own benefit. Such development and patent protection is an extremely expensive process and if the manufacturers generally had followed this course, there would have been a very large duplication of effort and expense.

"(b) On the other hand, the manufacturer might select some outside concern, like the Hartford-Empire Company; entrust to it the work of developing and protecting machinery of the glass industry generally and support that concern in its development by paying a proportionate contribution which in this case was best measured by royalties on production.

"(8) The latter course was the one which the manufacturers very wisely chose. The result has been that the Hartford Empire Company has now become the most important glass equipment concern in this country and probably in the world. This means that H-E has a duty toward the whole industry not only of developing and supplying machines immediately needed, but of keeping in advance of that need by inventing further improvements. It also must act as a

source of service and information for its licensees in all technical matters relating to their business and must help to steady, as far as possible, the general glass industry. H-E has done this to the best of its ability; has spent enormous sums in machine development and patent litigation, as well as in research along mechanical, physical and chemical lines."

Exhibit 2001, a communication from R. A. Blunt of the Buck Glass Company to F. Goodwin Smith of Hartford, dated May 23, 1935, relates a discussion which the writer had with J. Morrison of the Obear-Nester Company, a non-licensee of Hartford:

"My advice to Morrison was as follows:

" 'The only really effective control exercised in our industry is through the Hartford agreements. If another feeder comes into the market, it might reduce the amounts of royalties paid by various people now, but it would entirely destroy the protection which various people enjoy in their principal lines. I, therefore, advise you, for the good of the industry and your own operating company, to work out some plan with Hartford whereby you can realize on the feeder and, at the same time, maintain the various ware alignments which now exist in the industry."

The last exhibit ably illustrates the viewpoint of the licensee of Hartford who has been fortunate in securing one of Hartford's licenses. It assumes that, by receiving and accepting a license and coming under the "effective control" of Hartford, the usual worries of a manufacturer over the marketing of his product and the competition that he is forced to undergo are largely settled.

Of course, there was more than one manufacturer in practically every line of ware except the non-container field belonging to Corning. Hence, in order to stabilize the trade further, a quota system was set up and followed by the manufacturers in order to maintain prices and prevent any undue competition. This quota system was published through the medium of the Glass Container Association, one of the defendants herein. The defendants admit that there was a quota system in effect under the N. R. A., but they deny that there was any compulsory quota system during any other time. However, there is evidence that the quota

system was in effect both before and after the N. R. A. (Ex. 667).

While it is true that no one was absolutely bound to follow the quota system, nevertheless in practical effect all companies had to follow it quite closely or run the risk of bringing down upon them the wrath of Hartford, Corning, Owens, Hazel-Atlas, Thatcher and Ball. Since the smaller manufacturers had to rely upon Hartford alone for their machinery and equipment, this was tantamount to compulsion. In fact, Hartford, through its policy of retaining title to practically all the machinery used by its licensees, retained a control over them under the threat of Hartford to take away this equipment in event of their bad behavior, at least at the expiration of the eight or ten year license which was customary. The license, lease and royalty system will be discussed more in detail later in this opinion.

Another method of maintaining the stability of the industry was the absolute refusal of Hartford to license new capital which desired to come into the industry. Whenever new capital was interested, it inevitably wound up in Hartford for the purpose of obtaining machinery. In each instance, Hartford refused to grant the new license (Hartford claims to have issued two new licenses during its lifetime, to wit, to the Northwestern and Diamond companies). Hartford has admitted that this has been its policy. Its reason or excuse for so doing is that it thought the industry was over-crowded and that the plant capacity was far in excess of the demand.

In my opinion, a dangerous situation exists, inimical to the public interest, when one man, or a group of men, has the power, finally and definitely and apparently without other than purely selfish reasons, to exercise the power of life or death over proposed new industries as well as existing and operating industries. It is not only a dangerous situation but is in direct contravention of the spirit and the letter of the anti-trust laws.

From the record in this case, there can be no doubt that Hartford, at times ably assisted by its most favored licensees, to wit, Owens, Hazel-Atlas, Corning, Ball and Thatcher, determines and limits the law of supply and demand. This is beyond the right of any individual or corporation, and certainly goes far afield from the limited monopoly granted a patentee by virtue of his patent. More-

over, the record indicates that both Hartford and Owens wanted every plant in the industry running at full capacity. That is not a normal condition in modern industry.

In exhibit 787, dated September 10, 1932, F. Goodwin Smith of Hartford wrote to H. C. Mandeville of Thatcher, in part as follows:

"Will Levis has just telephoned me that you concur with him in the desirability of immediately getting Davis and Lamb into the fold under restricted conditions such as he mentioned. • • •

"I cannot see any quicker or better way for stabilization than what we have outlined."

In exhibit 1363, dated March 31, 1933, written by R. M. Eldred of Hartford, we find a reply to the request of the Universal Company to make a certain quantity of beer bottles per year, which read as follows:

"we are refusing such requests, knowing that in doing so we will be playing our part in an attempt to stabilize the beer business to some degree.

"Contracts are being made for beer bottles over a wide range of prices, some of which include a small profit, other of which involve an inevitable loss.

"We believe that the beer business and the beverage business generally, demands some form of protection, such as we have exercised in the milk bottle business over a period of years."

In exhibit 585, a communication from W. E. Levis of Owens to F. Goodwin Smith on October 11, 1930, we find the following:

"I • • • feel that if you could understand our position and were in general sympathy with it, your contact with many of our competitors would tend to assist in educating them as to the folly of the methods they are using, and would be very beneficial in creating a stability in the industry. We, of course, are legally prohibited from contacting these competitors on matters of this kind, and are trying to maintain a situation whereby our customers are all on an equal level as far as price is concerned when they are using the same volume, and a position where the public generally knows the prices prevailing for the products that we manufacture."

Exhibit 584 is a communication from F. Goodwin Smith to W. E. Levis, dated October 7, 1930, on the subject of price leadership, and reads in part as follows:

"leadership in any industry depends upon two basic requirements—

(a) That such leadership should be clearly aimed at stabilization of prices at a reasonable level above cost.

(b) That it should be maintained through the years with substantial steadiness and consistency.

(c) That the industry should have confidence in its purposes and steadiness."

In a memorandum entitled "W. E. L. Price Policy," dated February 13, 1930, W. E. Levis states (Ex. 775):

"Our organization must be perfected along the lines of an aggressive force securing as much business as possible at the best possible prices, and an efficient factory organization producing the highest quality of product at the lowest possible cost. Our organization must be developed to the point where the industry fears it and our house must be in order with all possible economies having been effected and our possible capacity being operated to the maximum.

"Our negotiations with Hartford Empire Company and others, so far as our patent situation and royalty income is concerned, should be an attempt to secure a position whereby we pay no royalty on any item we produce and we attempt to force all others to pay royalty on every item they produce, we participating with anyone else in the royalties they receive,

"Then, I think we can consider a stability program.

"If we contemplate seeking stability before we have done these things, we can obtain it only if we, as leaders, extend every possible co-operation to the rest of the industry by issuing our price list as a new mark for them to shoot at and standing on a one-price basis as well as maintaining our present rated capacity to the possible capacity of the entire industry, which is bound to cause us the loss of some business, thereby reducing the percentage of our possible capacity which we will be operating and preventing our achieving the perfection of organization and economy for which we are working and thus increasing our costs.

"I, therefore, recommend that our Sales policy shall be to get a greater proportion of the natural increase in new

business in the industry and a greater proportion of the existing business in the industry at the best possible price and with as little demoralization as possible, securing a sufficient volume to permit us to operate 100% of our possible capacity. This will give us time to develop our organization and perfect the suggested economies. Then, we can determine what our stability program is to be."

It is clear from the record that the stabilization of the industry which the defendant wanted and talked about was an illegal and unlawful stabilization.

It is argued by the defendants that prices generally in the industry are low and that the public is not required to pay exorbitant prices in return for the products that it purchases.

If we accept this argument from the standpoint of a comparison of present-day prices with the prices of glassware produced by the old hand-gathering method, then, doubtless, there is much merit in the contention of the defendants. It is sensible and reasonable to assume that with the advent of automatic machinery there would be a substantial step-up in the daily production of glassware as well as a substantial decrease in the cost of labor employed in the production of glassware. But whether prices are low or high in comparison with the cost of manufacturing and marketing is beside the question in the present inquiry. The defendants are putting forward the same contention that was made by the defendant companies in the case of United States v. American Tobacco Company, 221 U. S. 106 (1911). In the opinion of Judge LaCombe, one of the four trial judges in that case, 164 F. 700 at 702-703, we find the following statement:

"What benefits may have come from this combination, or from the others complained of, it is not material to inquire, nor need subsequent business methods be considered, nor the effects on production or prices. The record in this case does not indicate that there has been any increase in the price of tobacco products to the consumer. • • •

"During the existence of the American Tobacco Company new enterprises have been started, some with small capital, in competition with it, and have thriven. The price of leaf tobacco—the raw material—except for one brief period of abnormal conditions, has steadily increased, until it has

nearly doubled, while at the same time 150,000 additional acres have been devoted to tobacco crops and the consumption of the leaf has greatly increased. Throught the enterprise of defendant and at large expense new markets for American tobacco have been opened or developed in India, China, and elsewhere. But all this is immaterial. Each one of these purchases of existing concerns, complained of in the petition, was a contract and combination in restraint of a competition existing when it was entered into, and that is sufficient to bring it within the ban of this drastic statute."

Manifestations of Conscious Guilt

Earlier in this opinion, acting in accordance with the pattern set down in the First Standard Oil Case, we set out to inquire into (a) the conduct of the parties, (b) the proof as to what was done, and (c) the results which have arisen, in order to ascertain the intent of the parties toward a restraint of trade, a monopolization, or an attempt to monopolize.

In the case of United States v. American Tobacco Co., 221 U. S. 106 at 181-182 (1911), we find the following, which is particularly apropos at this time:

"Considering then the undisputed facts which we have previously stated, it remains only to determine whether they establish that the acts, contracts, agreements, combinations, etc., which were assailed were of such an unusual and wrongful character as to bring them within the prohibitions of the law. That they were, in our opinion, so overwhelmingly results from the undisputed facts that it seems only necessary to refer to the facts as we have stated them to demonstrate the correctness of this conclusion. Indeed, the history of the combination is so replete with the doing of acts which it was the obvious purpose of the statute to forbid, so demonstrative of the existence from the beginning of a purpose to acquire dominion and control of the tobacco trade, not by the mere exertion of the ordinary right to contract and to trade, but the methods devised in order to monopolize the trade by driving competitors out of business, which were ruthlessly carried out upon the assumption that to work upon the fears or play upon the cupidity of competitors would make success possible. We say these conslusions were inevitable, not because of the

vast amount of property aggregated by the combination, not because alone of the many corporations which the proof shows were united by resort to one device or another. Again, not alone because of the dominion and control over the tobacco trade which actually exists, but because we think the conclusion of wrongful purpose and illegal combination is overwhelmingly established by the following considerations: * * * (c) By the ever present manifestation which is exhibited of a conscious wrongdoing by the form in which the various transactions were embodied from the beginning, ever changing but ever in substance the same."

Now let us examine again, (a) into the conduct of the parties, and (b) into the proof of what was done, from the viewpoint of possible "conscious wrongdoing," in order to ascertain wrongful purpose and intent.

The record is replete, as disclosed by the contemporaneous writings of the principals in this case, of an apprehension upon their part of a violation of the anti-trust laws, an apprehension that in some instances amounted to a conviction that the laws were being violated—convictions that led to the taking of anticipatory steps upon their part to forestall the full force and effect of the penalties that would follow proof of violation.

The secretiveness that surrounded certain of the many transactions and the frequent instances wherein the anti-trust laws were discussed and analyzed, the extreme care that was taken to complicate the record of a transaction in order to make ultimate discovery difficult, all point to a manifestation of conscious wrongdoing upon the part of the parties involved.

Section 22 of the April 9, 1924 Agre-ment. The history of the much-talked about Section 22, or "veto" section of the April 9, 1924, agreement between Owens and Hartford, may be considered profitably in discussing consciousness of wrongdoing. Under that section it was necessary for Hartford to obtain the consent of Owens to the granting of any licenses on machines embodying inventions of Owens. We go into the history of that section, not to show that the section itself was or was not illegal, but to show that the parties had a consciousness of guilt with respect to their entire relationship.

Owens and Hartford were very secretive about the 1924 agreement and did not want to have it exhibited to anyone. Exhibit 399 is a memorandum written by H. K. Smith of Hartford, dated December 23, 1926, regarding the suit against Lamb by Hartford:

"I said we were not particular about the Miller matters, but the exposure of the 4-9-24 Agreement, especially Sec. 22, Owens veto on licensing, was serious" and "That the judge might easily require all this to be produced"; "That Brown had written for Carter and Wms. to come on. That I did not know what to do about Sec. 22"; "Williams said both the Owens & Miller matters were serious"; "He asked if Owens had ever really flatly vetoed a license. I said I thought not, strictly speaking. (FGS says I am wrong—i. e. as to Three Rivers Co.)"

On January 25, 1927, H. K. Smith of Hartford wrote to L. T. Williams, counsel for Owens, as follows (Ex. 1839):

"Now as to the really important matter, namely Section 22, in regard to which you say Mr. Boshart does not wish to make an amendment.

"Of course, so far as this particular patent suit is concerned, our attorneys have succeeded in keeping out the Owens Agreement, so that this immediate risk of a disclosure has been eliminated—certainly for the present.

"It is, however, I think, safe to assume that sooner or later, either in one of these various patent cases or in some other way, Section 22 will become public property, and if so, I think it is almost certain that it will be laid, along with other matters of complaint, before the Federal Trade Commission. We have a pretty close touch with the industry and there is enough going on underneath to make me quite sure of that fact. In other words, I think that we ought to act in regard to Section 22 on the assumption that it will be before the Federal Trade Commission (or possibly the Attorney-General) within the next two or three years. Now, the course of events thereafter will, I think, be as follows:

"The Commission will feel that it has enough of a case on Section 22 to justify its going into an investigation of our two companies and their related combination, especially in view of the dominant position of the Owens Company. When they once get this idea, the rest is going to follow

like a snowball rolling down hill. Their field agents will come to our companies and either we will give them voluntarily all the information in regard to all our various deals or they will get it from us by subpoena. We will then have a complaint issued, probably against both companies, and taking of evidence and then a trial before the Commission.

"We will then *certainly* be found guilty by the Commission. My experience in the Thatcher case before the Commission was so surprising that I have no hope of any fair hearing before the Commission. They walked right through all questions of law, in so far as they paid any attention at all to my argument and several of them paid no attention and simply found against me in the conclusion. Taken individually, they are as a rule very fair and honorable gentlemen, but as you perhaps may have found out, they are a long ways from being a court or having any real judicial tradition.

"Then we will either have to appeal to the Circuit Court of Appeals for a review or do as I did in the Thatcher case, refuse to obey their dissolution decree and let them appeal to the C. C. A.

"Up to this point of the game, the proceedings will not be widely public property. But when it gets into the C. C. A., of course all of our contract relations of almost every sort will be hauled out and exhibited to the trade. At this point, I think we would have a better chance of winning, so far as Section 22 is concerned at least, because I have always felt that that did not constitute any illegal restraint of trade. But even if we did win, we would then have the result of a long series of expensive litigation, publication of all our intimate affairs and a pretty mean situation all around and nothing gained by it. And in my opinion, the one thing most likely to start this with the Trade Commission is this Section 22. The rest of our contract relations are pretty complex and pretty carefully safeguarded and there is no special point that stocks out like a sore thumb, especially as Owens and ourselves are in pretty active competition. But Section 22 stands out by itself, like a lighthouse, and would be the one point which would focus on us the attention of the Commission and of the Government.

"Holding as I do the belief that Section 22 is legally proper, I nevertheless want to have clear before the executives of our two companies the practical results in the way of inconvenience and publicity that are likely to arise from

it. Then if they choose to go ahead in the face of these probabilities, my duty is performed.

"I don't think that the danger to Hartford-Empire is anything like as great as it is to Owens. We are a comparatively small concern and have no such long history of patent monopoly or commercial power behind us. Our only general weakness is the mere fact that we have got together a lot of patents.

"The situation with Owens, of course, is quite different, as you have always pointed out to me.

"Our selfish interest in this matter, however, recognizes the fact that if the dominant position of Owens, taken with Section 22, suggests this sort of a 'ruction', Hartford-Empire is going to get dragged into it and share equally with Owens in the general unhappiness that will follow."

In passing, it might be well to comment here on the fact that Hartford and Owens cancelled Section 22 in 1931, and that it is now claimed by both parties that neither of the companies observes the spirit of Section 22 in their relationship with one another and have not done so since its cancellation; that, when the Ball Brothers Company through its officers was discussing in conferences with the officers of Hartford, Owens and Hazel-Atlas, the question of incorporating into a written agreement a limitation upon Owens and Hazel-Atlas of 100,000 and 300,000 gross of fruit jars per annum, the conferees were advised by attorneys that such a written provision would be illegal in the face of the anti-trust laws, and that it is now contended by all the parties that such an understanding in the form of a gentlemen's agreement does not now and has not existed. In view of the contemporaneous writing of Herbert Knox Smith, one of the principal actors in the history of this inquiry, that "the rest of our contract relations are pretty complex and pretty carefully safeguarded," it behooves the court to proceed with caution, and perhaps with some degree of suspicion, in the face of the record disclosing the actions of the parties after the cancellation of Section 22 and after the consummation of the Ball Brothers agreement.

In 1929 there was a proposed revision of Section 22. In writing to W. E. Levis about this revision, H. W. Carter of Owens stated on May 10, 1929 (Ex. 665):

"Mr. Goodwin Smith and Mr. Lloyd Williams have always felt that there was danger from Washington in this veto section. It was originally put in over their opposition by the insistence of Mr. Owens, and more recently they have urged its cancellation, but were not able to persuade Mr. Boshart that it was wise.

"As I see it, we would retain little veto power of any practical advantage under the amended section, while at the same time the objection to the section from the Washington point of view would remain about as before."

Under date of May 23, 1930, H. K. Smith directed the following letter to L. T. Williams (Ex. 405):

"We have just had two days talk with Henry Carter and C. B. Belknap here and I have taken up with them a question which was in my mind prior to their coming, namely, the old question of a possible elimination of Section 22—Licensing Restrictions—from our General Agreement of April 9, 1924.

"I have always been of the opinion that this Section in there was a danger point for both of our Companies and for the validity of that Contract, although, so far as the Contract's validity is concerned, I have felt that in strict law, we ought to be able to justify that Section. But the trouble is that when you get into the Anti-Trust problem strict legal interpretation is only a small part of the problem, so that I have always felt that this Section was dangerous.

"But now the Anti-Trust situation is developing in such a way as to add very considerably to my fears about that Section.

"We have, first, the Petroleum Cracking case which you and I have discussed, in which apparent restraint of trade by exchange of licenses is a very important feature. As you know, I didn't like the law of that decision but, of course, it stands until the Supreme Court tips it over, if it ever does.

"Secondly, there has come up pretty much, every session of Congress, a Bill with a good deal of life in it providing that it shall be a good defense to patent litigation if it shall appear that the plaintiff (in the words of the most recent Dill Bill, S-4442) 'is a party to any combination (in the form of trust or otherwise), agreement, understanding, license or cross-license relating to or involving the use or control of said patent with any patentee or other person owning

or controlling patent rights that are directly or indirectly related to or connected with the business resulting from the use or control of said patent, the effect of which is to substantially lessen competition or tend to create a monopoly in commerce arising out of the use or control of such patent or patent rights.'

"You will observe that the first part of the above language is a direct quotation from the Sherman Law but that there has been added to it the words 'license or cross-license'. I enclose a copy of the said Bill in case you don't happen to have one. I am informed that this Bill has a pretty good chance of being reported favorably by the Committee and that there will be a hot fight in the Senate on it.

"Now this all goes to show the tendency on the part of the average citizen toward attacking patent monopolies and the general unfavorable position which such a monopoly has in the minds of the public.

"Thirdly, there is this most recent suit brought by the Government against the General Electric Company, Radio Corporation, American Telephone and Telegraph Company and Western Electric Company and Westinghouse Company, on the patent combination into which these concerns have entered. That Bill raises much the same questions as were raised in the Petroleum cases and, of course, is a much more dangerous action in some ways because the average citizen had not the slightest personal interest in Petroleum Cracking, but is, as a a rule, the owner of a radio and can get quite excited about that subject.

"I feel, therefore, that the whole status of exchange or cross-licensing of patent rights or a combination thereof has taken on a new phase; is coming into public attention to a far higher degree than before and that anything in our contract which even looks like restraint of trade by means of patents may be a target for attack.

"I, therefore, urge upon you very strongly the desirability of wholly eliminating Section 22 from that Contract.

"As a matter of fact I think it has been of very little practical use or advantage. You people probably know now a good deal better than you did six years ago in 1924 how firmly our policy is established of avoiding any wild-cat and reckless granting of licenses, regardless of any contract obligations to any one else. In short, I should think it would be pretty clear to you, as it certainly is to me, that the small practical advantages derived from the existence of this

Section are negligible as compared to the dangers which it contains.

"In my various talks with you on this general subject I know that you and I have both rather expected, sooner or later, some sort of Governmental investigation and, possibly, attack of the Anti-Trust Laws. I think we have felt that in such attack Section 22 would be one of the storm centers. I know that both of us would rest a good deal more easier if this danger were removed.

"My suggestion, therefore, is that you take this up with your organization and let us know what their views are".

Exhibit 671-B is a letter from H. K. Smith to L. T. Williams, dated September 18, 1930:

"I am now informed that your deal with the Atlantic Bottle Company has gone through. This adds an additional factor to those which I specified in my letter of May 23rd as constituting the dangers confronting both of our Companies on that Section.

"Won't you be good enough to glance again over my said letter of May 23rd so as to have that in mind and then add the following consideration:

"I think it entirely possible that at any time now some agent, either of the Department of Justice or the Federal Trade Commission, being advised of your latest acquisition of Atlantic Bottle Company, may appear some fine morning in my office and ask me about the relations between our two Companies.

"Of course I could refuse, in the first instance, to give him this information until I had consulted with you. I should hate to do this, however, because it would simply increase his suspicions and he would ultimately get the truth about Section 22 anyhow and if we cancelled it after such an interview it would look like an admission of weakness. Both you and I know very well that if such a man should see Section 22 it would probably cause him to make an unfavorable report to the Department or the Commission. I might explain all I liked about the fact that this Section only covers patents owned by Owens but to the average man I don't think this would have much effect and I think the result would be certainly to start something.

"Therefore, I would greatly like to be in a position when I receive such an inquiry to show him our Contract frankly with that clause already cancelled.

"Now I feel pretty sure that I don't have to argue this point with you. I think you feel about as I do but what I am after is to urge you to bring it before the necessary authority in your Company and to see if we can't get this dangerous clause cut out before it gets us into trouble."

Exhibit 406 is a memorandum by H. K. Smith dated October 28, 1930:

"1. Most important of all, and practically imperative, is the cancellation of Section 22 of the Owens-Hartford 1924 General Agreement. I have put this question up to Henry Carter and Lloyd Williams three or four separate times at least, and I understand that they concur in my view of the matter, namely, that this clause is a distinct danger point from the standpoint of the Anti-Trust Laws.

"In view of the recent combination of Owens and Illinois and of their still more recent purchase of Atlantic Bottle Company, I feel that I may receive, at almost any time, a visit from some agent either of the United States Attorney General's office or of the Federal Trade Commission, asking for information as to our relations with Owens-Illinois.

"When that time comes I shall be obliged either to show that agent the Owens Contract as it now stands with Section 22 in it; or else refuse to show it to him, in which case his suspicion will at once be aroused and, of course, the Government can ultimately get that Contract by subpoena.

"If, on the other hand, I do show it to him right off I am quite sure that his attention will be primarily centered on Section 22 and no amount of explanation will prevent him from reporting that there is substantially a violation of law there. In my opinion it is not a violation of law but the ordinary field agent will, I think, consider it as such and so report it.

"What I want is to be able to show him that Contract with that Section out of it. With that Section out of it it a perfectly plain license and contract."

Exhibit 408 is a memorandum by H. K. Smith dated November 11, 1930:

"4. At this point Mr. Williams came into conference with Mr. Safford and myself and we took up our desired elimination of Section 22 of the General Agreement. I made my argument to him for such elimination stating the dangers

of the Section as it now stands from the Anti-Trust standpoint and the further fact that it was of little practical value because our policy always had been as stringent as Owens, and, while I could not promise anything for the future, I expected that it would remain so.

"Mr. Williams said that Mr. Levis took the position that the General Agreement had been approved by the Board of the Owens Company; that he did not feel that he ought to change it without a similar approval and that this matter would be put up to the Board at its next meeting sometime in December. Mr. Williams said that he agreed, generally, with my position; also that he thought all the Owens' people agreed with it as a broad proposition, but that when each actual case of new licensing came to their attention their thoughts shifted toward the danger of increased competition and they would feel less willing to give up this veto power.

"I pointed out to him that this danger of Government action hit us as well as Owens; that this Section 22, in my opinion, was dangerous mainly because it would serve as a fuse to explode a lot of other highly explosive materials that are in our histories."

Under date of November 20, 1930, H. K. Smith wrote to L. T. Williams as follows (Ex. 407):

"In connection with the suggested cancellation of Section 22 of our General Agreement, I want to add a couple of considerations to what I said to you when I saw you here in Hartford last.

"1. As you know, it is my opinion that Section 22 is probably legal when taken by itself and with a thorough understanding of the principles involved. The real difficulty lies in its

(a) Psychological effect, and

(b) Surrounding circumstances

As to its psychological effect I am quite sure that it would catch the attention of an investigating agent of the Department of Justice as the most suspicious thing in the Contract. If he did not understand it completely he would probably report that in itself it was illegal.

"Secondly, and more important, he might understand it perfectly and regard it as legal in itself but as furnishing a foothold upon which further conduct might be carried on which would be *illegal*.

"You will remember the famous 'Gary Dinners' in the Government's attack on the U. S. Steel Corporation. Judge Gary was in the habit of calling together the heads of the various competing steel corporations for regular dinners at pretty frequent intervals. I do not think that there was any direct evidence that agreement on prices took place at these dinners. But the Government claimed and the public generally believed that such illegal agreements did take place there; that the opportunity was present and that human nature was such that it was almost certain that they did agree on prices.

"Section 22 is clearly in just about that class. The Government would certainly claim it might be legal in itself but furnished the ground and excuse for illegal conduct.

"2. The second consideration that I want to call to your attention is the probable change in the general attitude of the Department of Justice in this new administration. I was in Washington yesterday and was talking with a man who is not now an official but was formerly a cabinet officer (not under Coolidge) and who still has very close connections with the administration. He indicated that he thought that during the Coolidge administration there was a fairly regular custom in the Attorney General's Office of giving practical consent to transactions and combinations of doubtful legality under the Anti-Trust Laws. He added that that situation no longer exists.

"I had not mentioned any specific case to him, we were simply talking in general. But I feel pretty sure, from what he said, that there is a good deal more danger of an attack on Anti-Trust grounds that there was in the last administration."

Exhibit 409 is a communication by H. W. Carter of Owens to W. E. Levis, dated December 13, 1930, as follows:

"The following is by way of comment upon the insistence of Hartford-Empire management on the desirability of cancelling Section 22 of the General License Agreement of April 9, 1924, entered into between Hartford-Empire Company, on the one hand, and The Owens Bottle Company, on the other:

"Mr. Williams has sent me copy of his letter to you of December 9, on this subject, giving the legal reasons why he believes, with Hartford, that this section should be cancelled. These are based mostly on his consideration of the

Sherman and Clayton Acts, and the possible effect of the Dill Bill, if that measure, which has already passed the Senate, should become a law. I understand that the conclusions reached by Mr. Williams in this connection are substantially those heretofore reached by Herbert Knox Smith, General Counsel for the Hartford-Empire Company.

"Both lawyers have made a particular study of the so-called anti-monopoly statutes, and I assume that their position is well taken."

This is followed by comments on why the section might be eliminated from the business and practical standpoints.

Exhibit 410 is a communication from F. Goodwin Smith to H. W. Carter dated February 9, 1931:

"We received this morning the signed agreement canceling Section 22. I think it is a good piece of business for all of us, and that we have forestalled a great many annoyances which might have had considerable danger in them. We appreciate very much indeed the attitude of your company in regard to this matter, and I trust you will express our gratitude to Mr. Levis."

The Manner in Which Competing Patents Were Purchased. Another very pronounced way in which a consciousness of guilt exhibited itself was in the manner in which certain of the purchases of competing patents were accomplished. The parties constantly strove to give the deals the outward sign of validity and, as stated in one of the exhibits, to make it difficult to unscramble them. In very few instances were the patents of other concerns taken directly. Rather they tried to find some indirect method of reaching the desired goal of acquisition of all patents. This was done deliberately with a view toward avoiding the anti-trust laws. In addition, they were afraid of the aggregation of too many patents into a single hand. This is true of the acquisitions of the patents of Howard, W. J. Miller, Tucker, Reeves & Beatty, O'Neill, and of the deal with Lynch.

The W. J. Miller and Tucker, Reeves & Beatty deals were consummated at approximately the same time. The procedures for acquiring the assets and patent rights of these two companies were usually considered together. Exhibit 73 is a letter written by L. T. Williams, counsel for Owens, to H. K. Smith, general counsel of Hartford, on July 9, 1924. It will be noted that this letter deals with important

acquisitions that are being contemplated within three months after Hartford and Owens had come together by virtue of their agreement of April 9, 1924:

"Mr. Baker tells me that negotiations are actively in progress for acquiring the Tucker, Reeves and Beatty patents, and that consideration is being given to purchasing Miller's rights, particularly his applications interfering with the Tucker, Reeves and Beatty applications. I think you and Mr. Goodwin Smith are fully advised of the proposal though perhaps not of the exact present status of the negotiations. As I understand it, it is now proposed that title to the Tucker, Reeves and Beatty patents and applications be transferred to Hartford-Empire Company directly, or possibly through the Owens Company, (though I see no reason for the latter procedure) and that payment of the purchase price be distributed over a period of years and made out of the royalties payable by the present licensees of Tucker, Reeves and Beatty, with a maximum limit and a guaranteed minimum limit. I also understand that the Miller rights, whatever they are, are probably to be purchased outright, for cash by Hartford-Empire Company.

"You and I discussed very briefly when I was in Hartford last April the question of acquisition of patent rights by Owens or Hartford for joint use and the probable effect of such acquisitions in bringing on an attack from the Federal Trade Commission or some other Government agency. I feel, and I think you do likewise, quite strongly that the Owens-Hartford contract standing by itself offers no just ground for attack by the Government for violation of the Anti-Trust Laws, and that if an attack should be made we ought to be able to defend against it.

"As I said to you last April, though I am somewhat apprehensive as to the effect of acquisition of further patent rights by the joint Owens and Hartford interests, or by either of them for joint use, my fear is that additional acquisitions will tend not only to invite attack as to those acquisitions but also to put a color upon the original Owens-Hartford contract that will make it look like the beginning or a foundation of an attempt to combine all of the gob feeder patents under one control, to thereby control the manufacture of bottles, and thus to restrain trade and tend to create a monopoly.

"I am not thoroughly familiar with the patent situation and particularly with the position that Tucker, Reeves and Beatty and Miller hold with reference to the Owens-Hartford patents. Mr. Rule tells me, however, that the present feeder used commercially by Tucker, Reeves and Beatty infringes Owens patents; that this feeder might possibly be so modified as to escape such infringement; and that there has been some talk of their having in process of development, at least on paper, of a feeder which they claim will not infringe Owens or Hartford patents and which will be covered and protected by applications for patents filed, or to be filed, by them.

"It seems to me it would be much safer, and I would much prefer, to operate under the Owens-Hartford contract without further acquisitions of patent rights other than developments made by our own engineering departments. It may be, of course, that the tangle of interferences and cross-claims of infringement require the acquisition of these rights and taking of consequent risk. What I am trying to do is to point out the tendency to invite, and to increase the danger of, an attack on our original contract if we make additional acquisitions of patent rights.

"The real substance of the matter, as I see it, is that Tucker, Reeves and Beatty are infringing Hartford's patents and that they want protection for themselves and their licensees against an attack by you. Do you not think that the deal would look better if put in such form that Tucker, Reeves and Beatty would pay Hartford rather than that Hartford should pay them? Could not they take a license from Hartford and agree that their licensees should likewise take licenses from Hartford? These licensees would then pay to Tucker, Reeves and Beatty royalties at the regular rates, in the aggregate not less than $50,000 or more than $200,000 (or whatever the final figures may be) and pay the balance to Hartford. That would probably cover the situation except possibly that Hartford is not protected against the granting of further licenses by Tucker, Reeves and Beatty under their present patents and under the patents to issue on their pending applications. This could be covered, of course, by an exclusive license by them to Hartford, subject to their outstanding licenses. Possibly this protection would be secured from the fact that by accepting a license from Hartford they would thereby acknowledge the validity of all the Hartford patents included in the

license. I am not familiar enough with the details of the situation to know whether this arrangement would suffice. What I am driving at is this:—that the transaction shall have neither the form nor the substance of further acquisition of patents or of patent rights by Owens or Hartford but that Hartford is simply granting licenses to people who are now infringing its patent rights.

"This letter, I fear, is rather long and rambling but I want to get to you my thought that we should keep away, as far as possible, from the substance and certainly from the form of acquiring competing patents and patent rights. At least a strong argument can be made that the aggregation of competing patent rights is as much prohibited by the Anti-Trust Laws as the aggregation of competing factories.

"Mr. Beatty is to have a conference with Mr. Baker here early next week, at which time the matter will be gone into more particularly as to the form the transaction will take, and I would, therefore, appreciate very much a letter from you at your earliest convenience, giving me your views and suggestions as to procedure."

Exhibit 1749 is a letter from H. K. Smith to L. T. Williams dated October 20, 1925, and reads in part as follows:

"Mr. W. J. Belknap has suggested, I understand, for our consideration here, the possibility of some arrangement with the Miller Engineering Company and W. J. Miller, the Lynch Glass Machinery Company and the O'Neill Company (I don't know its exact name). This arrangement would look to some sort of an elimination of the patent disputes, but mainly, I think, toward a combination into single control of the Miller, Lynch and O'Neill forming machine businesses.

"Now, I can see certain very decided advantages in some such deal. If it did nothing more than to put our present competitors like these into one group rather than into three, it would certainly simplify the situation. And if that group, while legally and financially separate, was, nevertheless, in friendly hands, this also would be an advantage."

This seems to encompass in a few lines the whole philosophy underlying the operations of these two companies,

Hartford and Owens, over a period of years from the time they entered into the agreement of April 9, 1924. The elimination of patent disputes, which is the reason assigned now by the defendants in this case for the many combinations and acquisitions that the record discloses, appears to be secondary, and the elimination of competition appears to be primary. Continuing from the exhibit:

"But, of course, you and I have got to keep our friends 'out of jail' and similar difficulties. We don't know very much about the details of this suggestion, but I thought it worth while to put it before you generally, pretty early in the game, so that you can have it in mind. Offhand, I should say that if it were handled in a certain way, it might be perfectly safe from a legal standpoint. Suppose, for instance, that these three concerns were bought up and amalgamated into one concern by outside financial interest: That neither Hartford nor Owens took any share in its stock and that then Hartford and Owens, holding certain important patents on forming machines, should make an ordinary licensing agreement with the new company for substantial royalties on those patents. And, of course, as part of this deal, we would dispose of the present feeder patent conflict. Such an arrangement seems to me, as far as Hartford or Owens is concerned, fairly free from legal objections. Of course, the new combination itself might possibly be attacked simply as a combination. That would depend in the first place on the way in which it was combined and in the second place, on the extent of its business, but I shouldn't regard that danger as very serious.

"Please observe that this letter is very tentative and may be premature and mistaken. I am writing on very insufficient information. But I know that for my own part, when these germs first begin to grow, I like to watch the process from the start and not be called in as an undertaken after the victim has passed out.

Exhibit 76 is a communication by H. K. Smith entitled "Procedure" dated June 1, 1925, and directed to L. T. Williams. It reads as follows:

"*Procedure*

"*O'Neill*

"Have some third party take option on O'Neill and then when the option is exercised, have O'Neill patent rights

transferred to Owens or Hartford openly and rest of the O'Neill assets disposed of in whatever way may be desired.

"I do not think there is much danger in the O'Neill matter, however it may be handled. Preferably, however, I think, unless there is some good reason for continuing the O'Neill plant in business, that plant and all tangible assets had better be disposed of without ever coming into actual ownership of Hartford or Owens. O'Neill wants to go out of business anyhow and is insignificant as a competitor. But, nevertheless, his plant is to some extent, I understand, a producer of competing forming machines and it might be a little better not to have title come to either Owens or Hartford.

"*Lynch*"

"Let this matter lie until Federal, O'Neill and Miller have been attended to. There is no haste about it and in any event, it seems probable that we can accomplish all we want to in this direction without any purchase or any considerable capital investment. His price is probably now at the high point and may be materially reduced if the other things we have in mind are realized.

"*Miller*

"Probably the best way to handle Miller is to make a contract with some wholly outside party agreeing to pay him a certain sum for the Miller patent rights only, this sum being sufficient to cover the difference between the marketable value of Miller's tangible assets and the option price. Then let this outside party liquidate Miller direct just as a receiver would and turn over the patent rights to us for the agreed price.

"In this case, also, I want to avoid having the productive plant of Miller, which is now in competition with us making feeders, come under our control in any way. We should neither take any interest in the option nor in their plant at any time.

"As to Miller patent rights, I feel that the danger or criticism there is small for the reason that, as I understand it, he has got no patent hold on us at all by way of domination and his patent rights are important to us only as a nuisance in maintaining interferences. If that be so, we are not destroying any competition whatsoever by tak-

ing over his patent rights,—we are simply ridding ourselves of patent office litigation which I think we have a right to do.

"*Federal*

"In this case it seems necessary and reasonably safe also, to handle the matter in a very direct manner. Of course, merely as a special precaution and in order to hold the situation entirely open, I would advise that any option taken on the Federal rights be taken to an outside individual whom we can trust.

"But then I should have that individual transfer all the patent rights of whatsoever character direct either to Hartford or Owens so that they will come under the joint purchase clause and the licensed inventions.

"As to the Federal licenses themselves, I think it would probably be a little safer (not from the standpoint of the Sherman Law, but from the ordinary contractual law) to have the title to those licenses, in the first instance, go to someone outside, like the Hartford Special Machinery Company. That will leave Hartford-Empire in a position to bring any pressure to bear which it desires upon these licensees, because Hartford-Empire will not be a party to their licenses. It is probable, of course, that the Federal people will insist that we grant a complete immunity under our patents to their licensees at substantially the present terms of their existing licenses. But there may be a number of details as to form of license, fields of ware, right to get additional feeders, exclusive rights, etc. that both Federal and we will agree ought to be modified. It is for this reason that I think we should keep our hands clear so that we can bring pressure to bear if we want to.

"The option in this case, if a formal option be taken, should give us the right to pretty complete information as to T. R. & B. income from licenses, license expense, all the important facts as to licenses themselves, the number of feeders, licensees' rights to get additional feeders, etc. Of course, if possible, we should also secure an agreement from them to show us their patent applications, but this may be difficult and is not absolutely essential as I see it.

"We must, of course, insist on knowing all of the liens, grants, licenses and rights of whatsoever nature that are now outstanding against the Federal patent rights. (By Federal above I mean, of course, Tucker, Reeves & Beatty).

"This transaction, merely by virtue of its size and importance, seems to me might invite a Government attack upon us, perhaps more than any of the others. On the other hand, I do not feel that such attack would succeed. We have the most ample grounds for disposing of our difficulties with T. R. & B. in some such way. We have spent several hundred thousand dollars, over a period of six to eight years, in patent litigation with them; it is quite possible that if their patents come out and ours come out, the situation, as far as the machines are concerned, would be at a deadlock; if this newly discovered application comes to patent, we may be in a position where we have got to have protection from it. So that we seem pretty well justified under the Shoe Machinery cases, in acquiring these patent rights.

"It may be well to consider here, also, what would be the result should any or all of these matters be upset by Government action, as follows:

"*O'Neill*

"This matter is comparatively small anyhow. All that we would hold would be the O'Neill patents which are mostly foreign and therefore would not come under any decree arising under the Sherman Law. Meanwhile the O'Neill organization and business as a going concern would have been irrevocably disposed of. We might be forced to put our O'Neill U. S. patents up for auction and sell them for a song and perhaps lose a few thousand dollars this way, but I cannot see that anything serious can happen in any event as to this transaction.

"*Miller*

"The situation is ever clearer as to Miller. We will get the Miller interferences out of the Patent Office by the transaction and presumably before it can be upset in the courts, our patents will have come to issue and I do not see that any decree can hurt us in any way. Certainly it can't take away our patents from us, because they never belonged to Miller in any sense.

"*Federal*

"Under similar circumstances, a dissolution here might be much more serious, depending upon the nature of the decree. It could hardly force us to give up any patents taken out in our name. We might conceivably be forced

to dispose of patents practically taken out in the name of T. R. & B. and assigned to us. By the time, however, that such decree would become final, we would hope that the situation would be such that those Federal patents would not be worth much to anybody. We might lose whatever value we paid for them, but that would be all.

"Of course, the court might order that we transfer the entire Federal licensing business to some other party and turn over to that party the Federal patents. This, of course, would simply restore to a certain extent the existing situation and establish a competitor. It would have either one of two results — either that competitor would be in a reasonably strong position, in which case we could probably dispose of all these assets as a going concern for somewhere near what we paid for them and take our chances with competition. Or, by that time, the situation would be such that it would be practically impossible to restore the old Federal competition even if it had all the Federal patents; in which case we wouldn't get much for the sale of these assets, but on the other hand, the competition wouldn't be serious.

"Meantime, we would have gotten out our own patents; probably had the income from Federal licenses for several years and very possibly also, as a result of the Federal and the other deals, we might have brought in Hazel-Atlas under license.

"I, therefore, do not see much danger of having any of these deals upset, as set forth. If they are upset, I still believe that by that time, we will be in a better position even with such dissolution than we would be otherwise; and I can see no danger whatsoever of any criminal liability because the cases are necessarily so doubtful in the matter of law that they could never get any jury to convict and I doubt if any prosecuting officer would ever attempt any criminal action. Criminal action in cases of this sort, so far, has practically been non-existent."

Here is laid bare the innermost thoughts of a man whose desire for power over an industry, and the consequent financial gains that flow therefrom, transcends any lurking respect for the laws of his country or concern for its future well-being. He passes lightly over the likelihood of a criminal prosecution — the only language, perhaps, that he could understand. His judgment in this regard has proved to be correct. This court has not been apprised of the

reason for failure of criminal prosecution. This unanswered question rests on the doorstep of the Department of Justice.

In analyzing the likelihood of civil prosecution at some time in the distant future, he coldly weighs the consequences on the one side, together with the penalties that might be exacted, and the ultimate financial gains on the other side. Then, like a current popular radio comedian, he decides to do it and risk the whipping.

Exhibit 77 is the reply of L. T. Williams to the last document, and is dated June 6, 1925. It reads as follows:

"*Owens Bottle — Hartford Empire*

"Discussion was had as to the possibility of a merger or mergers of the following concerns on the basis of figures presented by them severally:

O'Neill	$ 300,000
Lynch	1,500,000
Miller	500,000
Federal	1,500,000
Total	$3,800,000

"*Miller:*

"Some third person might independently purchase the entire assets of Miller and then sell to Hartford and Owens the Miller patents and applications for patents at a figure which would permit him to make some profit out of the salvage value of the remainder of Miller's business. Deal might better take the form of an option so that if the Federal situation should develop properly the Miller deal would be dropped or could be consummated at a lower figure. It would be preferable not to deal with Miller if his feeders could be stopped by the Hartford or Owens Federal patents, which would save capital outlay and legal difficulties.

"*O'Neill:*

"O'Neill is the least important of the companies mentioned. Little difficulty need be apprehended if he alone is considered but if he is included in the deal with others he simply adds to the load of legal complications. If the Federal situation develops properly O'Neill might well be disregarded. The acquisition of O'Neill's physical plant or its elimination from the competitive business adds a feature not present in the mere disposition of his patents.

In any event, the physical property should not go to Owens or Hartford, either permanently or temporarily.

"*Lynch:*

"Lynch might better be disregarded at this time. Unless the Federal situation can be properly developed, it seems undesirable at this time to undertake the capital outlay and legal burdens incident to consolidating the forming machine situation, at least until such time as it becomes fairly evident that Headley and Thompson can not secure patents of real value. If either the Federal situation or the Headley and Thompson situation properly develops Lynch and O'Neill may be disregarded or may be much more easily disposed of.

"*Federal:*

"The Federal situation is the most important and demands more immediate attention than the others. If the Federal claims, reasonably allowed, are as good as they now appear, they will suffice to stop all commercial feeders in present use. Owens and Hartford, however, will probably be able to stop the use of Federal's present form of feeder, thus creating a deadlock. Either situation, however, make a good justification for purchase of the Federal patents. It would be better to take them directly in the name of Hartford or Owens, or both, than to use some indirect method which, on examination, will be perfectly apparent and which will give considerable basis for the claim that the acquisition is not proper within the law. If we are correct in our view of the propriety of acquiring the Federal patents, nothing need be done with the others, thus avoiding capital outlay and loading the structure with legal difficulties. It seems now that if an interference is declared on Federal's allowed claims it will be with Hartford only and not with Miller. Unless Miller is advised of the situation, it would, therefore, appear unnecessary to deal with Miller, or, if later deemed desirable, he can be dealt with on a much better basis after the Federal patent issues. In view, however, of the possibility of successful attack on the Federal acquisition, it might be well to so apportion the rights thereto between Owens and Hartford at the time of acquisition or in the acquisition as to properly protect both Owens and Hartford in case of dissolution. In

any event, before the deal with Federal is consummated, we should have complete information as to outstanding licenses and obligations, the breadth of pending applications and the measure of protection to be given to Federal's existing licensees.

"Proposal for an independant organization to take over one or more of these companies is fraught with many difficulties. If it is really independent it will constitute a greater menace to Owens and Hartford's present patent position than the divided situation does, and if not really independent it will present greater objections from a legal viewpoint than their direct acquisition. This conclusion is only tentative and may be entirely erroneous."

Exhibit 1904 is a copy of the minutes of a directors' meeting of Hartford held on July 7, 1925, regarding the Tucker, Reeves & Beatty purchase, and reads in part as follows:

"*Provided* further that the Counsel of Owens Bottle Company and of this Company shall give it as their opinion that the danger of attack and dissolution by the Government under the Anti-trust laws is not sufficiently great to be allowed to stop this purchase."

On July 31, 1925, H. W. Carter of Owens wrote to H. H. Baker of Owens regarding the Tucker, Reeves & Beatty purchase (Ex. 624):

"While I have referred to Owens and Hartford as though they were to take the above assignments direct, there is nothing in the suggested arrangement which would prevent the interposition of a holding corporation so as to nominally leave Owens and Hartford entirely out of the deal, and in fact, I would consider this rather desirable. Neither is there anything in this proposed arrangement which would interfere in any way with the suggested sale of certain Hartford rights to a separate party (for example, the Hartford Special Machinery Company, as has been heretofore discussed."

Exhibit 74 is a memorandum by F. Goodwin Smith of Hartford, dated August 7, 1925:

"As far as the Sherman Law and Clayton Act are concerned, Mr. Knox Smith feels that we are on safe ground

and are justified in going ahead as far as these two laws are concerned.

"In brief, I feel that the net results of the advantages and liabilities of concluding the deal are more to our benefit than the net results of the advantages and liabilities of staying out of it, as we now, to the best of our abilities, appraise such advantages and liabilities under the complex and difficult problems which the matter presents.

"Mr. Williams is in favor of making the purchase on the basis of the appraisal of its advantages as against its disadvantages and the disadvantages that exist or arise from not making it. He, however, is not so confident that we are entirely safe from attack under the Anti-Trust laws as Mr. Knox Smith is. He also expresses the view that the interposition of the various legal barriers such as the assignment of certain patent rights to Hartford Special Machinery Company, the transfer of licenses to a trustee and the option to Feeder Patents Company to take any or all of the licenses, are more in the nature of screens than barriers or defenses. He insists that the decision to make or not make the purchase should rest on the basis of a clear recognition that we, in the last analysis, are probably assuming the same liabilities and disadvantages we would assume if the Tucker, Reeves and Beatty applications for patents and their licenses were taken directly by the same person. He recognizes, however, that the screens or defenses discussed may, and probably will, look much stronger to the Tucker, Reeves and Beatty licensees than they do to him, with the resulting advantage to us in dealing with them for a revision of their licenses."

Exhibit 80 is a report by H. K. Smith regarding the Miller and Tucker, Reeves & Beatty purchases, dated August 20, 1925:

"Of course, in substance, the transaction comes pretty close to a purchase of these licenses with their income by Hartford and Owens. Hartford and Owens certainly furnished the money and expect ultimately to control all these inventions and patents. And if it could be shown by any licensee whom we were suing that this arrangement and separation of title was a mere cover for an inequitable or wrongful transaction, it is probable that any court would strike through these legal diversities of title and tie up the

Hartford inventions wherever located with the licensing income and thereby estop us."

Exhibit 650 is a letter from H. W. Carter to W. H. Boshart, both of Owens, dated September 10, 1925, regarding the O'Neill patent rights:

"One of the principal questions in this connection, however, would seem to be as to the standing of the proposed purchase with relation to the Sherman law, and on this score, we defer to the better founded opinion of Mr. Williams. It looks dangerous to us."

Exhibit 1860 is a memorandum by H. K. Smith concerning an interview with Chester Underwood of the Knox Company, dated August 1, 1929:

"I pointed out the difficulties which arose by reason of the possible bearing of the Sherman and Clayton Acts, namely, that it was impossible for us to take over any of the stock of Knox-O'Neill Company, as this would undoubtedly be a violation of the Clayton Act."

Exhibit 1064 is a communication from A. T. Safford of Hartford to T. C. Werbe of Lynch, dated February 12, 1934:

"We finally concluded to handle it as we are attempting to do now, keeping the Lynch sale and the Hartford license separate. We feel if Lynch is given licenses to issue on our behalf that it will look too much as if in this case Lynch is acting as Hartford's agent for the purpose of issuing licenses. This is a result which we do not wish to have happen, because if it does, then all the advantage of separating the sale and the license disappears."

Exhibit 534 is a communication from A. F. Reed, an applicant for glass machinery, to F. Goodwin Smith, dated August 1, 1936:

"We have built up our business on Lynch machines and have had no other type of machines in our plant for a great many years and we do not think there is any justice in their telling us today that we cannot have any more machines without taking out a Forming Machine License with you, whereas all their other customers operate these machines without a Forming Machine License.

"This seems to us to be a good example of monopoly in restraint of trade."

Exhibit 535, dated August 4, 1936, is the reply of F. Goodwin Smith:

"I do not understand what you mean by 'monopoly in restraint of trade.'"

Miscellaneous. The question of a charge of conspiracy or violation of the anti-trust laws came up also in connection with some of the litigation in which Hartford was engaged. Exhibit 1736, a communication from F. Goodwin Smith to H. H. Baker of Owens, dated January 8, 1925, reads in part as follows:

"Nester has not paid his minimum royalties and we have brought suit against him covering these payments. We have not actually set the date of trial, due to the fact that Herbert Smith wished to get the price-fixing clause canceled in all our previous contracts. This has practically been completed, and Herbert Smith plans, as soon as he can spare the time, to go to St. Louis and push the matter to a conclusion."

Exhibit 1737 is a communication from H. K. Smith to Lehmann and Lehmann, attorneys, dated April 20, 1926, regarding the suit against the Obear-Nester Company:

"Now what we want to do is to push these defendants as hard as we can in both directions. I am not particularly anxious to have you bring your suit to a trial at once, because there is, of course, an uncertainly in it, based on the Sherman Law question, but on the other hand, I would like to have you give that suit an appearance of activity and if in doing so, you get drawn into a position where you have to try it, I shall not be greatly troubled. Personally, I feel we have at least an even chance to win that case even against the Sherman Law defense and I further believe that the patent case will never be tried, but that as soon as it is started, there will be a movement toward adjustment and we shall insist in any such adjustment that your case is also settled. Therefore, if there is any action you can take which will give the defendants the impression that we are about to push your case, I wish you would take it.

"We have no particular desire to oppress the Obear-Nester Company, but on the other hand, their action in lying back and neglecting to pay minimum royalties for a considerable period and then finally alleging the total invalidity of the contract on the ground of the Sherman Law has left a very bad taste in our mouth and I don't propose, if possible, to let them get away with it."

Exhibit 662 is a communication from H. W. Carter of Owens to F. Goodwin Smith dated December 26, 1928:

"Mr. Boshart would like to talk this matter over with you and at the same time discuss other important questions, such as that of suing Ball. He feels that Ball ought to be sued just as soon as we can find out what patents he is infringing. And this may require considerable thought, inasmuch as it seems altogether probable that the infringement will extend to Hartford's phase controlling patents and perhaps also to our Lott patent.

"If this should prove to be the case, then separate suits by Hartford and by Owens would be indicated, at the risk of the conspiracy charge which we have been dreading but the fear of which up to the present time seems to have been more in anticipation than in reality.

There are other isolated instances where the parties manifested a consciousness of guilt. Exhibit 861 is a communication from W. E. Levis to R. H. Levis, dated August 18, 1937:

"Bunn Belknap is not very enthusiastic about the Illinois Company's owning these shares, because he feels that it has been a distinct asset to be able to state that no one connected with Owens-Illinois has any stock in Hartford. It does, however, fit into the whole Illinois Company investment picture, particularly if the funds with which shares were purchased were furnished by others with whom we may subsequently become associated, such as I. J. Collins and his associates."

Exhibit 1742 is a letter from S. H. Philbin, counsel for Hazel-Atlas, to R. D. Brown of Hartford, dated May 24, 1934, which reads as follows:

"A man called to see me this afternoon who said that he was James L. Dalton, from the Department of Justice, and

he showed me an identification card to that effect. He asked for information regarding the Hartford, Hazel and Owens license contracts and the litigation by Hartford against Hazel. I told him what he probably already knew, namely, that there were license contracts entered into between these concerns as of July 1, 1932, and I also told him about the patent suits brought by Hartford against Kearns-Gorsuch and Hazel. He asked for copies of the license contracts and I said that Hazel did not feel free to give them to him without the consent of the other parties to the contracts.

"I also told Mr. Dalton that you had communicated with me in October, 1933, after an inquiry at Hartford regarding Hartford licenses, and that it was then the position of the Hartford Company that it was unwilling to have its licensees, including Hazel, inform others, including the Department of Justice, concerning its license contracts with them.

"Mr. Dalton asked me for the name of the Hartford-Empire counsel and I gave him yours, so that he may call upon you in the near future.

"I am sending a copy of this letter to Mr. McNash."

Exhibit 1778 is a memorandum by C. B. Belknap of Owens dated June 16, 1932, relative to an amendment of the 1924 agreement between Owens and Hartford:

"Hartford takes a non-exclusive license in place of an exclusive license, but this is a matter which is done simply to guard against government interference and is nothing which Owens-Illinois itself cares for."

It seems clear to me that the foregoing exhibits—writings made contemporaneously with events as they were occurring in the industry and made by key figures in the industry representing the large companies, defendants herein—give ample evidence of "an ever present manifestation of conscious wrongdoing." Especially are those transactions of a tell-tale character that were set up as obstacles in a possible and expected future Government investigation or suit under the anti-trust laws. In the purchase of the Tucker, Reeves & Beatty and the W. J. Miller patents and assets, deceptive transfers were set up as screens to deceive the uninitiated and hamper an investigation under the anti-trust laws. They appear to be no different from the screening transactions that were complained of by the Supreme Court in the American Tobacco Company case.

In reviewing a case comprising a record so voluminous as the one involved here and in writing an opinion covering the important matters at issue, it is impossible to touch on many issues and matters developed in the trial of the case for lack of time and space, and it is only possible to record and comment on those matters carrying the most weight in the conclusions arrived at by the court. Only excerpts from certain selected exhibits are quoted herein. There are many matters, developed in the trial and contained in the record, that cannot be discussed here for lack of time. There are some matters in addition to those already discussed which the court feels ought to receive comment as carrying weight.

As we have heretofore seen, after the closing of the April 9, 1924 agreement between Hartford and Owens and through the combined efforts of these two companies acting in conjunction with one another, much litigation was pursued. Many competing patents and businesses were acquired and pending interferences in the Patent Office were pressed to conclusion so that patents in which these companies were interested might be obtained. Protective measures were also taken, especially by Hartford, to insure the position that it had and was acquiring in the glass container industry.

In the pursuit of the ambitions of these companies following the agreement, tactics were pursued and things were done that were of questionable character when looked upon in the light of the ultimate purpose, to wit, domination and control, which were sought to be obtained.

Ten days after the agreement was signed, on April 19, 1924, V. M. Dorsey of Hartford wrote exhibit 1766 to H. W. Carter of Owens, in which he stated that he hoped that Hartford and Owens would "soon have an opportunity for putting the cards on the table and properly stacking them for use against our common adversaries." In testifying from the witness stand, Dorsey stated (R. 9395) that by "stacking the cards" he meant "arranging them so they fall in the proper order," and that he was getting the patents and patent applications "so they would come out in the most effective way." This, it will be noted, was a communication to Owens and suggested joint operation upon thier part against their common adversaries, which meant, in Dorsey's words, that they would get the patents and

patent applications "so they would come out in the most effective way."

Then followed a course of procedure involving a shifting of claims between the patent applications of the two companies in such a manner as to obtain the strongest patents possible. This was done through the joint cooperation of the legal staffs of the two companies. As a result, patents issued virtually as the two cooperating companies desired, and this, of course, set up a distinctive handicap to inventors having applications in the Patent Office for patents that might come into competition with those sought by and issued to Hartford. This joint method of action in the Patent Office in order to prevail over their adversaries resulted in distinct advantages to the two companies that otherwise might not have been obtained.

Another method that was pursued for the purpose ostensibly of extending the patent monopolies as long as possible was the practice of "blocking off" and "fencing in" the patents of other inventors. Exhibit 388 is a memorandum by H. K.K Smith of Hartford, dated February 18, 1930, and entitled "Memorandum of Policy." It reads in part as follows:

"Many further examples can be cited where applications now owned will have a distinct bearing on our future developments, as well as on developments in many lines by others, and it would seem to us to be the wisest and safest policy to protect all ideas which are so new as to have patentable possibilities.

"We now have a number of applications which were filed to definitely forestall the development of competing machines by others.

"It often happens that if minor improvements are protected by patents, machines and processes licensed under the original basic patents are given much longer earning life by the fact that the minor improvements continue the protection on the machine, and even when the basic patents expire, others are prevented from using the latest commercial form of the machine.

"*Example:*

"The Owens basic patents expired several years ago. Nobody, however, dare use the present type of Owens machine because of improvements covered by minor patents.

Likewise, if the original patent protection obtained on particular machines should not be sustained by the Courts, yet a second line of defense patents covering details and improvements may become a most valuable asset.

"It has always been our ambition to obtain patents which will be related to furnace, melting and refining, feeding, delivery, forming, automatic handling, carrying, stacking and annealing. Conceivably we might lose patent domination of one or more important links, but still retain practical control of the whole chain by means of controlling the most efficient form of the other links * * *

" 'Direct patent protection' means those patent applications which read directly upon or cover our devices, parts thereof, or proposed physical improvements thereon.

" 'Indirect patent protection' of a device, includes those applications which prevent the use or improvement of an existent or possible substitute for the device. This 'indirect protection' seeks to block competing devices which would lessen our income.

"Of the 223 cases filed in the three years 1927, 1928, and 1929, 200 are direct or indirect protection to the devices mentioned above; 88 applications being 'direct protection' and 112 'indirect protection'."

At pages 15 and 16 of this memorandum appears the following:

"In taking out patents we have three main purposes,—

"(a) To cover the actual machines which we are putting out and prevent duplication of them * * *

"(b) To block the development of machines which might be constructed by others for the same purpose as our machines, using alternative means.

"(c) To secure patents on possible improvements of competing machines, so as to 'fence in' those and prevent their reaching an improved stage."

This last statement was made by one of the principal actors in the conspiracy and shows that Hartford's purpose in taking out patents had nothing to do with the progress of the arts and sciences and obtaining a reasonable reward to the patentee. It does show that Hartford

intended to use the patent privilege for purposes far beyond the intention of Congress in granting letters patent. This, coupled with the fact that the conspiracy involved herein actually discouraged many inventors from further efforts to improve the feeder art, is a complete answer to Hartford's position that everything it did was justified by its patent grants.

The publication and use of the so-called "Clarke Article" has consumed considerable time in the trial of this case, and only such time may be taken here as to show the nature of the proceeding, the purposes sought to be attained, and the results that were obtained from its use.

For a number of years Hartford had on file in the Patent Office its so-called Peiler "stuffing" application, by means of which it hoped to dominate the gob feeding art. The Tucker, Reeves & Beatty and the Miller feeders were competing with Hartford's feeders. Immediately after the April, 1924, agreement between Hartford and Owens, steps were taken which resulted in the acquisition by Hartford of Tucker, Reeves & Beatty and of Miller, with the financial and legal assistance of Owens. After these acquisitions had been accomplished, the Peiler stuffing application was released from the Patent Office interferences with these acquired applications. The Patent Office was still opposed to the issuance of a patent holding such broad claims as those contained in the Peiler application. Steps were taken by Hartford and Owens to change the position of the Patent Office in this regard, and one of these steps was the joint preparation of an article, to be signed by some apparently unprejudiced authority and to be published in some magazine of large circulation in the glass industry, for the purpose of bringing it to the attention of the Patent Office and thereby influencing it to issue the patent with the broad claims sought by Peiler. This article was written by R. M. Hatch of Hartford, acting in conjunction with R. D. Brown of Hartford, and under the critical eye of V. M. Dorsey of Hartford and H. W. Carter of Owens. On April 19, 1926, Hatch wrote to Carter as follows (Ex. H-5138):

"I prepared this article as far as possible with reference only to the proceedings of the Bottle Blowers Association, and knowingly and intentionally I reproduced some of the errors found therein."

Carter wrote to W. H. Boshart of Owens that (Ex. 137):

"Under the circumstances, I do not see that we need be very critical in our treatment of the article. If not too rank, would say that we better let it go through."

Hatch procured one W. P. Clarke, then president of the American Flint Glass Workers Union, to sign this article, under the pretense that it bore his authorship, and in payment therefor Clarke was later given the sum of $8,000 in cash by Hatch. This payment was shared by Owens and was charged upon the books of Hartford as going to "attorneys fees."

The article was published in the July 17, 1926, number of "National Glass Budget" and was entitled "Introduction of Automatic Glass Machinery; How Received by Organized Labor—By William P. Clarke, President, American Flint Glass Workers Union."

On October 11, 1926, the article was cited to the Patent Office by V. M. Dorsey of Hartford. The attention of the Office was called to the article as evidence that the Hartford feeders had been a great success, but the Patent Office was never apprised of the fact that Hatch, with the assistance of Brown, Dorsey and Carter, was the real author of the article.

On January 13, 1928, the Peiler stuffing patent application was allowed by the Patent Office and a patent was issued to Hartford which contained the broad claims that it sought over the gob feeding art.

At a later date, in the suit of Hartford against Hazel-Atlas, the article was relied upon by Hartford in the Third Circuit Court of Appeals. It appears that the Court in its opinion placed some reliance upon the Clarke Article, although the fact that one of the parties had written the article was never brought to its attention.

Legal Considerations

Article 1, Section 1, Clause 8, of the Constitution invests Congress with the power to enact the necessary legislation for the protection and consequent reward of inventors. This clause reads as follows:

"The Congress shall have power * * * to promote the progress of science and useful arts, by securing for limited

times to authors and inventors the exclusive right to their respective writings and discoveries."

Acting in accordance with this authority, Congress passed laws that awarded to an inventor a patent which conferred upon him the right to exclude others from the use of his invention for a period of seventeen years.

There is no question but that, under the privilege conferred upon an inventor through the patent, a patentee alone has the right to make, use or vend the patented article. Bement v. National Harrow Co., 186 U. S. 70 (1902). He may even refuse to make, use or vend, and thus withhold the value of his inventions from the public.

There is no question but that the patentee has the exclusive right to license his patents to others to make, use or vend the patented article. He may attach to his licenses such reasonable restrictions on the licensee as may be necessary and advisable to return to the licensor a reasonable reward for the use of his licensed inventions. United States v. United Shoe Machinery Corp., 247 U. S. 32 (1918); United States v. General Electric Co., 272 U. S. 476 (1926).

In the latter case it was said that the patentee may grant a license to make, use and vend patented articles "upon any condition the performance of which is reasonably within the reward which the patentee by the grant of the patent is entitled to secure."

The early policy of the Hartford-Fairmont Company, pursued by its successor, the Hartford-Empire Company, down to recent months, was to refrain from a use of the patented machinery or machines by itself becoming a manufacturer of glass products. The company further pursued a policy of having most of the patented machinery made by the Hartford Special Machinery Company. It refused to sell its machine outright to users thereof. Thus, the Hartford Company did not itself make, use or vend its patented machines, except that it caused the machines to be made for its own disposition. The company chose not to license others to make or vend its machines, but it adopted the plan which it pursued from early days down to recent months of licensing the use of its machines to manufacturers of glassware, and it placed within these licenses certain restrictions that limited the licensee on the kind of glassware that he might produce with the machine, the quantity of glassware that he might produce per annum, and the use to which the

licensee might put the manufactured glassware; as well as the market, weight, capacity, color, composition and territory (Northwestern). The record does not disclose that at any time did Hartford impose in its licenses conditions upon the prices which the manufacturer might charge for the product of the machine. This, it clearly appears from the record, was unnecessary. A system of price leadership obtains in the industry based on the control that Hartford exercises over the glassware produced by virtue of its restrictive licenses and its retention of title to the machines which it licenses. A system of price leadership obtains in the industry whereby, for example, Owens publishes its price list chiefly covering narrow neck glassware; Hazel-Atlas operates as the price leader for wide mouth glassware; Ball Brothers serves as price leader for fruit jar output; and Thatcher serves as price leader for milk bottles. The record is replete with instances where some of Hartford's favored licensees complained that another company was engaged in price-cutting. The record also discloses that upon receipt of such complaints Hartford took positive action, if the so-called price-cutter was not a licensee of Hartford, either by way of a threat of litigation, by actual litigation, or by such steps as led eventually to the purchase of the price-cutter by one of the favored licensees. The limited term for which the licenses were issued permitted Hartford to retain such a measure of control over its licensees that it was unnecessary to more than warn them. While there was no compulsory following of these prices, the companies were able to apply moral sanctions, with the cooperation of Hartford, which amounted to the same thing.

It is the contention of Hartford that the restrictions entered in its licenses were reasonable restrictions designed for the purpose of returning to the licensor a reward for his inventive genius, and that these restrictions were resorted to for no other purpose. As put in the concluding argument by counsel for Hartford, "we claim that such domination of any part of the industry, either glass machinery or glass, was only that inherent in the patents to which we believe we were entitled."

It is the contention of the Government that these license restrictions were the forefront of a broad general scheme to obtain and maintain domination and control over the glass container industry.

The record is convincing that despite the fact that the substantial part of Hartford's income is derived from fees and royalties resulting from the licensing system, yet its primary purpose in making use of such a system was to obtain dominance over the industry. It is equally clear that it was the primary purpose of obtaining monopolies and stabilizing the market which prompted the other defendants to join with Hartford.

Again referring to exhibit 395, entitled "Memorandum as to Hartford-Fairmont and Hartford-Empire History and Policy," dated March 26, 1928 and written by H. K. Smith of Hartford, we find on page 2 thereof the following:

"Consequently we adopted the policy which we have followed ever since of restricted licensing. That is to say,

"(a) We licensed the machines only to selected manufacturers of the better type, refusing many licensees whom we thought would be price-cutters, and

"(b) We restricted their fields of manufacture, in each case, to certain specific articles, with the idea of preventing too much competition.

"(c) In order to retain more complete control of the situation, we retained title to the machines, and simply leased them for a definite period of years, usually 8 or 10 years, with the privilege of renewal of a smaller additional term."

In 1922, V. M. Dorsey wrote to A. D. Falck of Corning as follows (Ex. 681):

"F. G. Smith, in private, suggested to me the most revolutionary theory, which he will no doubt talk to you about, viz., putting out the feeders very much like telephones are installed, that is, with an installation charge with a flat royalty plus royalties on production above a given amount. I think it has much to be commended. It would certainly put the pirates out of business quickly."

It will be seen from the above that Dorsey's chief interest in a licensing system was not the accrual of revenue therefrom, but the use thereof "to put the pirates out of business quickly." This could mean nothing more than the use of the licensing system for the purpose of obtaining domination over the industry.

In July of 1929, H. K. Smith wrote that (Ex. 255, Sec. 71):

"W. E. *l*evis said that his ideal for the future was a situation w-ere

(a) Hartford would control entirely the licensing under both Owens and Hartford patents, suction, gob feed and any other form.

(b) That Owens should confine itself to a manufacturing business.

(c) That Owens should have the right to use at preferential rates, all of these developments.

(d) That Owens should share in all of the income therefrom."

In November of 1929, W. E. Levis wrote, in a report to the Owens Board of Directors, the following (Ex. 775):

"Our negotiations with Hartford-Empire Company and others, so far as our patent situation and royalty income is concerned, should be to attempt to secure a position whereby we pay no royalty on any item we produce and we attempt to have all others pay royalty on every item they produce, we participating with anyone else in the royalties they receive."

It occurs to me that if the issuance of restrictive licenses by patentees on the use of machinery used in an industry wherein the patentees are important units, is part of a common scheme or cooperative effort upon the part of these units to obtain dominance of and unreasonably restrain trade in an industry engaged in producing an unpatented article, then certainly a court of equity has the power to declare such restrictions illegal in an action based on the anti-trust laws.

If the Hartford-Empire Company had extended to its licensees unrestricted licenses, permitting them the use of its machinery without limitations upon the use, kind or quantity, etc., of the unpatented product of the machine and had left them to sell at any price that open competition might dictate, free from any hidden threat, it could not be said that the patentee or licensor would fail to obtain a reasonable reward within the grant of the patent.

By the operation of the restrictive license plan, Hartford managed to protect the monopoly that Corning attained over the manufacture of the lines of ware particularly reserved to it; it was able to establish a milk bottle monopoly through its license to Thatcher, and a fruit jar monopoly

through its license to Ball Brothers. It is here interesting to note that, in many instances, where a restriction limited a licensee to the use of the glassware produced, this course of conduct virtually designated to the licensee the market in which he was to dispose of his unpatented product. If a licensee violated any of his restrictions, Hartford could cancel the license, repossess the machines, and put the licensee out of business. This put the licensees in a position where they had to so conduct themselves as that they might be in a favorable position, upon the expiration of their eight or ten year term, to receive a renewal license. Furthermore, it destroyed in time all incentive to assist in the progress of the arts and sciences by developing machinery and equipment other than that of Hartford. An example of this is shown in exhibit 629, quoted above, written by Garland Lufkin of Owens in 1929:

"I consequently agree with you that there is very little to be gained by us in continuing our present effort to conceive new ideas on feeder type machines."

A requirement in the licenses that were issued for many years, that all improvements on the machines become the property of Hartford and that the licensee acknowledge the validity of the Hartford patents used by him, further served to destroy initiative in promoting the progress of arts and sciences.

The patent privilege is a grant by the public, through duly elected representatives, made for the purpose of promoting the progress of the arts and sciences. Could it be said that this privilege, when bestowed, gives to the recipient the right to violate substantive laws enacted by the same representatives of the people and for their general protection? I repeat that it is the position of the defendant that the acts and things done by them were within the privilege contained in the patent grant, and that any control that may exist over the production and marketing of unpatented glassware is but the result of a normal exercise of the patent privilege. The court, however, is distinctly of the opinion, in the light of the entire record, that the dominance and control over the field of unpatented glassware are the primary objects of the restrictive licensing system pursued by Hartford, and that that control is so complete, so minute, as to preclude any thought that it is the unplanned result of

the exercise of privileges contained within the patent grant.

In Standard Sanitary Manufacturing Co. v. United States, 226 U. S. 20 at 48 (1912), the Court said:

"The agreements clearly, therefore, transcend what was necessary to protect the use of the patent or the monopoly which the law conferred upon it. They passed to the purpose and accomplished a restraint of trade condemned by the Sherman Law."

At page 49 of the same case we find the following:

"Rights conferred by patents are indeed very definite and extensive, but they do not give any more than other rights an universal license against positive prohibitions. The Sherman law is a limitation of rights, rights which may be pushed to evil consequences and therefore restrained."

In Morton Salt Co. v. Suppiger Co., (U. S. 1942) 86 Law Ed. 317 at 318, we find the following:

"It thus appears that respondent is making use of its patent monopoly to restrain competition in the marketing of unpatented articles, salt tablets, for use with the patented machines, and is aiding in the creation of a limited monopoly in the tablets not within that granted by the patent. A patent operates to create and grant to the patentee an exclusive right to make, use and vend the particular device described and claimed in the patent. But a patent affords no immunity for a monopoly not within the grant."

Again, at page 319, we find the following:

"The grant to the inventor of the special privilege of a patent monopoly carries out a public policy adopted by the Constitution and laws of the United States, 'to promote the Progress of Science and useful Arts, by securing for limited Times to * * * Inventors the exclusive Right * * *' to their 'new and useful' inventions. * * * But the public policy which includes inventions within the granted monopoly excludes from it all that is not embraced in the invention. It equally forbids the use of the patent to secure an exclusive right or limited monopoly not granted by the Patent Office and which it is contrary to public policy to grant."

In Ethyl Gasoline Corp. v. United States, 309 U. S. 436 and 456, 457, 459 (1940), we find the following:

"The patent law confers on the patentee a limited monopoly, the right or power to exclude all others from manufacturing, using, or selling his invention. • • • The extent of that right is limited by the definition of his invention, as its boundaries are marked by the specifications and claims of the patent. Motion Picture Patents Co. v. Universal Film Co., 243 U. S. 502, 510. He may grant licenses to make, use or vend, restricted in point of space or time, or with any other restriction upon the exercise of the granted privilege, save only that by attaching a condition to his license he may not enlarge his monopoly and thus acquire some other which the statute and the patent together did not give • • •

"He may not, by virtue of his patent, condition his license so as to tie to the use of the patented device or process the use of other devices, processes or materials which lie outside of the monopoly of the patent licensed; • • • or condition the license so as to control conduct by the licensee not embraced in the patent monopoly • • •

" • • • A very different scene is depicted by the record. It is one in which appellant has established the marketing of the patented fuel in vast amounts on a nation-wide scale through the 11,000 jobbers and at the same time, by the leverage of its licensing contracts resting on the fulcrum of its patents, it has built up a combination capable of use, and actually used, as a means of controlling jobbers' prices and suppressing competition among them • • •

" • • • The licensing conditions are thus not used as a means of stimulating the commercial development and financial returns of the patented invention which is licensed, but for the commercial development of the business of the refiners and the exploitation of a second patent monopoly not embraced within the first."

So in the case at bar, Hartford, by the leverage of its licensing contracts, resting on the fulcrum of its patents, has built a combination that exercises a dominance and control over the entire glass container industry that carry it far beyond the privileges granted in its patents; it has built up other monopolies not embraced in that granted by the patent.

In the case of Bement v. National Harrow Co., 186 U. S. 70 (1902), the plaintiff, the licensor, was suing the defendant, its licensee, for violation of the license agreement which gave to the licensee the privilege of using the rights under those patents in its business of manufacturing, marketing and vending to others to be used, float spring tooth harrows. The license agreement contained certain restrictions, among others, on the actions of the defendant that it would not sell its products manufactured under the license at less than a certain price, and that it would not be directly or indirectly engaged in the manufacture or sale of any other float spring tooth harrows than those it was licensed to manufacture and sell under the terms of the license. The Court, at pages 94-95 of the opinion, said:

"There is nothing which violates the act in the agreement that plaintiff would not license any other person than the defendant to manufacture or sell any harrow of the peculiar style and construction then used or sold by the defendant * * * In brief, after a careful examination of these contracts, we are unable to find any provision in them, either taken separately or in connection with all the others therein contained, which would render the contracts between these parties void as in violation of the act of Congress.

"It must, however, be conceded that the escrow agreement above set forth looks to the signing, by the parties mentioned therein, of contracts similar to those between the parties to this suit, designated A and B, and containing like conditions relating to the patents respectively, owned by such parties. But there is no finding by the referee that such contracts were in fact entered into by those other parties nor that they constituted a combination of most, if not all, of the persons or corporations engaged in the business concerning which the agreements between the parties to this suit were made. If such similar agreements had been made, and, if when executed, they would have formed an illegal combination within the act of Congress, we cannot presume for the purpose of reversing this judgment, in the absence of any finding to that effect, that they were made and became effective as an illegal combination. As between these parties, we hold that the agreements A and B actually entered into were not a violation of the act."

This case deals throughout with a license to make, use and vend a patented article, to wit, a spring tooth harrow.

There is no attempt in this contract relationship to control an unpatented product of the patented article. In the case at bar, we have the license restrictions on the use of the glass making machinery of Hartford so drawn as to limit the quantity output, the kind and the use of the product of the machines, to wit, glass containers, and the result of these restrictions is to effect a control over the entire glass making industry that unduly and unreasonably restrains trade therein.

Moot Questions. Following the filing of the complaint in this case on December 11, 1939, and up to the close of the taking of testimony in January, 1942, the defendants have amended the contract relations existing between them and complained of by the Government, and they have taken other and further steps for the purpose of eliminating illegal practices complained of by the Government, including the making of restrictive licenses, and in some of the steps that they have taken they have exchanged sums of money and even assigned patents. These steps were all taken without the formality of filing a motion or application in the court that had assumed jurisdiction of the case, and without consultation with the court.

In the closing arguments made by the defendants, they took the position that they had set their respective houses in order by eliminating or modifying the agreements and practices complained of by the Government, and that therefore the court is powerless to inaugurate any remedies against them or to enjoin them from doing anything that the Government complained of because those things are not now being done. In effect they say that the Sherman Anti-Trust Law, in Section 4 thereof, authorize the district court "to prevent and restrain violations of this act" and that no violations of the act are now in existence which the court is privileged to restrain. They say that all of these matters are moot questions.

It may be said here that the cancellations and the amendments and the new courses of conduct claimed to have been effected by the defendants were all without the knowledge and the consent of the court; the measures taken were those that the defendants believed were sufficient to remove them from any charge of a violation of the anti-trust laws. The court was not consulted as to whether, in the light of the record, he had any opinion as to whether the steps taken were sufficient to absolve the defendants from any restrain-

ing orders of the court and, most of all, whether they were sufficient to free the industry and restore free competition among manufacturers in the industry so that the public might have the benefit of competitive prices.

There has been a violation of the anti-trust laws through an illegal aggregation of patents upon the part of the Hartford and Owens companies; there has been an illegal combination resulting in an unreasonable restraint of trade in the glass container industry through the control of machinery used in the manfacture of glass; and there has been a domination and control of the glass container industry that has resulted in an undue and unreasonable restraint of trade. Until the court is satisfied that the illegal effects of those acts and things done have been dispelled and that the industry is freed from the domination and control of the defendants, and until the court is satisfied that these illegal acts and practices will not be resumed by the parties once this suit upon the part of the Government has been dismissed, it has a distinct duty to the public to look through the steps taken by the defendants during the past two and one-half years and during the pendency of this suit, and make such orders as the court deems are necessary and sufficient to remove the effects of the violations of the anti-trust laws. In any event, the court feels that the steps taken by the defendants in this manner do not substantially lessen the control and domination over the industry which they possess.

In accordance with a family tradition, I have been a consistent worshipper at the shrine of the Bard of Avon. So far, in the trip through life I have seldom found any quirk in human behavior that has not been inquired into and analyzed by the characters created by the famous Bard. In the tragedy of Julius Caesar, one Marcus Brutus is heard to say:

"Lowliness is young ambition's ladder,
Whereto the climber—upward turns his face;
But when he once attains the upmost round,
He then unto the ladder turns his back,
Looks in the clouds; scorning the base degrees
By which he did ascend."

Men cannot, by illegal means, erect an illegal structure—a structure of dominance and control over an industry

vital to the welfare of the public—and then, by destroying the illegal means by which the structure has been erected, take the position that they have reformed, that they have adopted a new course of conduct, and that they should go on their way unmolested by the law—as long as the illegal structure and its adverse effects upon the public remain. The court would indeed be derelict in his duty if he did not adopt those remedies which in his conscience he believes to be necessary and feasible to eradicate the illegal structure.

The defendants have eliminated what they believe to be the subject of the complaint by the Government. They say, however, that they were not prompted by a sense of wrongdoing, and that the agreements and practices which they have amended, curbed, or eliminated were not in any way wrong or illegal. It may, therefore, be feared that agreements and practices designed to accomplish the same purpose will be resumed if the court, believing that the agreements and practices are illegal, should dismiss the complaint without taking any measures of relief.

Conclusions. At the outset we have seen that the basic complaint of the Government is that the defendants have violated the anti-trust laws,

"By unlawfully conspiring, monopolizing, attempting to monopolize, and by unlawfully contracting, combining, and conspiring, and more particularly by acquiring and maintaining monopolies of (a) patents * * * (b) the manufacture and distribution of glass-making machinery and (c) the manufacture, distribution and sale of glass products."

There should be no doubt but that an aggregation of patents collected into the hands of one or two large concerns, acting in combination with one another for the purpose of attaining control over an important industry in this country, is a violation of the anti-trust laws, especially when the means whereby these numerous patents have been acquired are unlawful.

In conclusion, it may be said that Hartford, with the cooperation, first, of Corning and Empire and, later, of Owens, Hazel-Atlas, Thatcher, Ball Brothers and Lynch, pursued a plan whereby through threats of litigation backed by the financial power that it controlled, through litigation expensive beyond the dreams of the average man, through

the acquisition of the patents and businesses of competing devices and firms at a great outlay of money, has corralled within its possession and control an aggregation of all the patents that pertain to the gob feed process in the manufacture of glass—one of the two automatic processes whereby glass containers may be made. This aggregation of patents for these machines has been strengthened through the acquisition of patents covering other devices necessary in the manufacture of glassware to the extent that all the patents covering these other devices, such as forming machines and lehrs, have been acquired or are controlled by Hartford.

Hartford has acquired from others a total of 317 patents, and many of these were competing patents. In many instances, upon acquisition, the patents were shelved and the manufacture of the patented article discontinued. There are but two objectives that a corporation could have in acquiring an aggregation of all the patents relating to a particular industry—(a) to gain control of the industry and thereby eliminate all competition, or (b) to suppress those patents which it senses would be detrimental to its ultimate aims and desires. In the case at bar, the patents acquired were suppressed for the purpose of attaining control over the industry and for the purpose of eliminating competition.

On the other hand, Owens has similarly effected an aggregation of patents—all that are known to be in existence in the United States, at least—covering the suction art of automatic manufacture of glassware. Through the cooperation and the close working relationship of Hartford and Owens, they dominate the art and have eliminated competition between them, one for the purpose of controlling the art, the other for the purpose of stabilizing the glassware market.

This domination and control is not the result of a haphazard policy resulting in an occasional settlement of patent differences, either in the Patent Office or in the courts, in order to implement and preserve the patent rights at issue. It is the result of an over-all plan, a scheme devised and pursued throughout the years, to attain dominance by means of patent ownership and control.

The entire history of the Owens-Hartford "partnership," from its formation in April of 1924 down to the present time, indicates an unholy alliance designed by the parties

thereto to attain selfish objectives at the ultimate expense of the public. The primary purpose underlying the alliance was not merely to settle legitimate conflicts, Patent Office interferences or litigation in the courts, in the interest of efficient operation of the patents. The primary purpose was to achieve domination of the industry.

The history of the Corning-Hartford agreements is similarly not a history marked by a desire to eliminate patent differences, for the results alone indicate that the course adopted was for the purpose of assuring domination and control over a specific field of glassware for Corning, who from the beginning and down to the present time controls the policies of Hartford.

The steps taken in acquiring and maintaining monopolies over the manufacture and distribution of glass making machinery are such as to foreclose that market to anyone not already in the industry. Owens exclusively manufactures and uses the suction automatic device. Hartford, through its relationship with Lynch, controls the manufacture of feeding and forming machines and lehrs. It is impossible today for any individual or concern to engage in the manufacture of glass container ware with the use of automatic machinery, either gob or suction, without making application to either Hartford or Owens. Hartford has consistently followed a policy of refusing to license new enterprises, and hence no new concern can have access to the gob feed method of manufacture. Owens manufactures its machines alone for its own use and refuses to license anyone, so that a new enterprise cannot obtain a modern version of the suction automatic process.

In the manufacture, distribution and sale of glass products, the finger-tip control exercised by Hartford is so complete in its make-up and so efficient in its operation as to make the entire industry that is now engaged in the manufacture of glass container ware subservient to the desires of Hartford. This is accomplished, of course, by and with the cooperation of Owens in its control of the suction process and in its cooperation with Hartford in the control of those concerns engaged in the use of the gob feed process.

This whole system of control could not be the accidental result of normal growth and expansion, either of a patent holding and developing company such as Hartford or of a glassware manufacturing company such as Owens. It is the result of a planned procedure which places in the hands

of Hartford the power of life and death over individual units in the industry. It is said that the power to exact royalties is the power to control prices. Certainly the power to control prices rests in the hands of Hartford to increase the license fees and royalties charged its licensees at any time that it desires. The result of this, of course, is an increase in the charge to the public for the output of the glass making machines. Dominance over the entire industry is today so complete that at any time within the choice of Hartford and Owens prices to the consumer of glassware may arbitrarily be raised beyond all reason. To say that such dominance is a benevolent one, if true, is beside the point. The anti-trust laws frown upon such control whether it be benevolent or whether it be vicious, for the power of domination is the evil at which the laws are directed.

It is clear, therefore, that the defendants have far exceeded the rights conferred upon them by the patent grant. As stated by Judge Butler in National Harrow Co. v. Hench, (C.C.A. 3rd, 1897) 83 Fed. 36 at 38:

"Patents confer a monopoly as respects the property covered by them, but they confer no right upon the owners of several distinct patents to combine for the purpose of restraining competition and trade. Patented property does not differ in this respect from any other. The fact that one patentee may possess himself of several patents, and thus increase his monopoly, affords no support for an argument in favor of a combination by several distinct owners of such property to restrain manufacture, control sales, and enhance prices. Such combinations are conspiracies against the public interests, and abuses of patent privileges."

And, as stated by the Supreme Court in Standard Oil Co. v. United States, 283 U. S. 163 at 174 (1931):

"The lawful individual monopolies granted by the patent statutes cannot be unitedly exercised to restrain competition."

Therefore, upon the facts of this case, the argument of the defendants to the effect that the Hartford patents were controlling and that everything that was done was done to protect the patent monopoly of Hartford, is not a good defense, and it was for this reason that the court excluded all evidence introduced for the purpose of showing validity,

prior art, or infringement in connection with the Hartford patents.

Evidence was excluded pertaining to the value of the Hartford services to the industry. This, likewise, could not be a valid defense to violations of the anti-trust laws.

The defendants also argue that the price of glassware to the consumer has not increased. But again this is not a good defense if there have been violations of the law. Moreover, the history of the case shows the great extent to which automatic machinery has come into use within the past forty years. It is natural to assume that the cost of production would decrease with the great influx of automatic machinery. Evidently the defendants managed to retain this saving in the cost of production by means of the conspiracy herein, which is manifested by the large profits in the industry. The benefits certainly were not passed on to the public. And while this is the privilege of a patentee, he may not do so through concerted action with others in violation of the anti-trust laws.

Relief

The problem of relief in a case of this nature is a difficult one. The glass container industry is a large industry and the defendant corporations are large corporations. Nevertheless, the court must make the orders which he believes are necessary. The following is intended as a statement of the principles to be followed and is not a detailed account of all the steps necessary to effect a complete relief from the illegal practices.

The court believes that no half-way measures will suffice. There has been a deliberate violation of the law, and it is the duty of the court to do what he can to make certain that these violations of the law will cease and will not be resumed in the future and that competition will be restored in the industry. The record discloses that some of the individual defendants anticipated legal action by the Government, and went ahead in spite of that and violated the law. They also tried to anticipate the remedies that might be applied and did what they could to forestall the effect of such remedies and retain the benefits of their unlawful actions. The court intends to make certain that this does not occur. The Government has requested the dissolution of Hartford. The

court, however, is first going to make an attempt to avoid that, if it is possible to do so and at the same time restore competition to the industry. If this cannot be worked out to the satisfaction of the court, dissolution will be ordered.

The first step to be taken is the immediate appointment of a receiver or receivers of Hartford. The court is going to deny any stay from the appointment of such receivers. It is believed to be absolutely necessary that the receivers take over the management of Hartford forthwith. The court has reached this conclusion because of several considerations. First, as pointed out heretofore, important steps and changes have been made by Hartford during the pendency of this suit and without the knowledge of the court. Some of these have involved heavy financial obligations upon the part of Hartford, and were made for the advancement of the interests of the companies involved. For example, Hartford recently transferred three important patents to Corning. The court feels that this was done for the obvious purpose of continuing Corning's monopolies regardless of the outcome of this suit. Second, the court believes it absolutely necessary to prevent any further abuse of the patent privileges of Hartford and any further violation of the law, and, under the circumstances disclosed by the evidence, the court feels that this can only be done through court officers. It has already been pointed out that while the defendants have taken certain steps which they believe abolish the practices complained of by the Government, they insist that these practices are not unlawful. Hence there is no assurance that different steps designed to accomplish the same ends will not be taken. Third, the court feels it necessary to conserve the assets of Hartford and to preserve the status quo. Pending an appeal and final determination of the issues in this case, the receivers are directed to take over the management of Hartford and continue to operate under the present contracts and agreements of Hartford in its licensing and lease system. The funds received from the Hartford licensees are to be set aside and specially ear-marked as coming from each licensee. Upon confirmation of this decree by the Supreme Court, the funds so collected and set aside are to be returned to the various licensees without interest. In this way the court feels that Hartford is protected as much as possible and no appreciable injury will result.

The receivers are to remain in control of Hartford until the court is satisfied that the abuses and violations of the law have ceased, until the orders of the court have been carried out, and until the court is satisfied that there no longer remains a reasonable probability that these practices will be resumed. If, after the expiration of a reasonable time, it appears to the court that the steps he is now taking are insufficient to restore a free and competitive status to the industry, the receivers shall be ordered to submit a plan or plans for the dissolution of Hartford.

An order appointing the receivers for the interim until the entry of a final decree herein is being filed with this opinion.

We come now to the permanent steps to be taken. The most important question is with respect to the licensing and lease system now used by Hartford. The court believes that this is the greatest abuse. It is through the licensing and lease system that Hartford retains control over and dominates the industry. It is in this manner that Hartford maintains a system of stabilization of the industry and enforces restrictions and conditions far beyond the privileges of the patent grant. It is because of this system that it is unnecessary for Hartford, Owens, Thatcher, Ball Brothers and the others to enter actually into written agreements in restraint of trade. Every manufacturer in the industry knows what will happen if he fails to observe the practices established by these leading concerns—Hartford will repossess his machinery, if not immediately at least upon the expiration of his present lease. The court realizes that a license and lease system may be perfectly legal and just if properly used. However, in the instant case, there has been a deliberate abuse and misuse of that system; and the court believes that there will be further abuses in the future, as long as there is a semblance of that system remaining. It is the opinion of the court that this entire system must be abolished.

Any future system for the distribution of automatic machinery must be put on a basis of outright sale at reasonable prices. This is to include machines made under all of the patents and applications for patents owned or controlled by all the defendants herein and involved in this suit. In addition, all the defendants shall be required to license anyone, royalty free, in the manufacture of machines

embodying these patent rights. This will include all patent rights relating to the suction machine, feeders, forming machines and lehrs.

Henceforth this machinery is to be sold to anyone, the present licensees of Hartford as well as the remaining outsiders. Any newcomers who desire to go into the business of manufacturing shall be sold the necessary equipment, provided they have a proper credit rating. Anyone who feels that he has been abused in this connection may appeal to the court.

All the existing agreements, leases and licenses must be cancelled and any new agreements must be free of restriction and subject to the approval of the court. Hereafter any manufacturer of glassware may produce any item he desires. The machinery now under license by Hartford will be sold to the present licensees at reasonable rates.

The defendants will be enjoined from engaging in interstate commerce unless they (a) comply with the orders of the court, (b) agree to license anyone, royalty free, on all present patents and pending applications for patents for the life of the patents, and (c) make available to anyone who desires them copies of drawings and patterns relating to suction devices, feeders, forming machines (except Lynch) and lehrs.

There will be an injunction issued against the defendants restraining them from engaging in any of the practices which have resulted in the present unlawful control and domination of the industry. This will include an injunction against any corporate defendant holding stock in any other concern in the industry, and against all the individual defendants from owning stock in more than one concern in the industry and from being or becoming an officer or director in more than one concern in the industry.

The Glass Container Association must be treated separately. The court is of the opinion that this concern has engaged in unlawful practices through its cooperation in the furtherance of some of the aims of the conspiracy. In addition, it has been shown that it is a breeding place for many of the illegal practices established herein, and provides a channel through which they are effectuated. However, the court does not believe that dissolution is necessary. But its trade association activities must be stopped, as well as all the other unlawful practices in which it has been en-

gaged. The court believes it best that it shall continue merely as a statistical and research body, and shall not go afield in an effort to dictate to the industry, or be used for that purpose. Hence its personnel must be changed. This will include the membership of its Board of Directors and its officers. The new members are to be subject to the approval of the court, and shall have no connection whatsoever with any of the defendants herein. The so-called Statistical Committee must be abolished and no committee of a like nature shall be established in the future.

After the taking of testimony had ceased and while final briefs were being prepared, the Buck Glass Company, a a licensee of Hartford and not a defendant herein, filed a motion asking that that company and twelve other companies similarly situated be permitted to intervene for the purpose of enlightening the court on the question of relief, if such question should arise.

The court was of the opinion then that the movants desired to be heard on the value of Hartford as a servicing and research unit to the licensees, in event dissolution of Hartford was in the mind of the court. Dissolution is not resorted to by the court unless Hartford wills it so. The measures herein adopted by the court are deemed necessary to install competition to the industry, and the court does not believe that either willing or unwilling licensees of Hartford could assist it in the selection of the necessary measures, short of actual dissolution, as long as a semblance of domination over the industry remains.

The Government shall submit an order on this opinion within forty-five days. The appointment of the receiver or receivers is to take effect in accordance with the order signed and filed herewith. Any stay by the court of this decree, with the exception of the appointment of receivers, is to be conditioned upon the prompt prosecution of an appeal by Hartford and upon the continued carrying out of the impounding order heretofore entered by this court.

(Signed) FRANK L. KLOEB,
U. S. District Judge.

August 25, 1942.

In the District Court of the United States for the Northern District of Ohio, Western Division—Filed August 25, 1942.

Order No. 4426, Civil

C. B. Watkins, Clerk
U. S. District Court, N. D. O.

The United States of America, Plaintiff,

vs.

Hartford Empire Company, et al., Defendants

On consideration of the pleadings, testimony, briefs and arguments of counsel, and the opinion this day filed, it is now

Ordered Adjudged And Decreed By The Court:

1. That James A. Shanley, of New Haven, Connecticut, be and he is hereby appointed Receiver of all and singular the lands, property, assets, rights and franchises of the Hartford-Empire Company, including all patents and other property and assets, real, personal and mixed, of whatever kind or description and wherever situated, owned, leased or operated by said Hartford Empire Company, with all shops and other buildings and appurtenances of every kind, and all tools, machinery, furniture, fixtures, materials and supplies, and all books of account, records and other books, papers, cash in banks, and all other moneys, all debts, things in action, credits, stocks, bonds, securities, deeds, leases, contracts, muniments of title, bills receivable, accounts receivable, rents, issues, profits and income accruing and to accrue, as well as all leasehold interest and operating and other contracts, and all rights, interests, easements, privileges and franchises of said the Hartford Empire Company, and all other assets of every kind and description.

2. That said Receiver be, and he is hereby authorized, empowered and directed, first—to proceed in carrying out the directions of the Court as specified in the opinion and in the relief hereinafter directed to be issued; second, im-

mediately to take possession of all and singular said assets, and to run, manage, maintain and operate the properties of said the Hartford Empire Company wherever situated or found, whether in this State, Judicial District or elsewhere, including such properties and assets as the said the Hartford Empire Company holds, controls or operates under lease, trust agreements or otherwise, and to use, manage and conduct such business in such manner, in his judgment as will produce the best results, and to this end, exercise the authority of the said Hartford Empire Company and discharge all public duties obligatory upon it, and to preserve said property and assets in proper condition and manage and operate said property according to the requirements of the valid laws of the various States in which the same are situated, and in the same manner that the defendant Hartford Empire Company would be bound to do if in possession thereof, and to employ and discharge and fix the compensation of all officers, managers, superintendents, agents and employees, and to make such payments and disbursements as may be needful and proper in so doing, and to collect and receive the income and tolls of said property, including the dividends on stock and interest upon bonds or other securities, and to hold and retain the net revenues thereof, in such manner and to the end that the same may be applied, under this order and such orders as the Court may hereafter make.

3. That the said Receiver be, and he is hereby authorized and empowered to institute and prosecute within this State or elsewhere, and in his name as Receiver, or in the name of the Hartford Empire Company, as he may be advised by Counsel, the right to appoint whom, subject to the approval of this Court is hereby granted the said Receiver, all such suits as may be, in his judgment necessary for the proper protection of said property and the discharge of his trust, and likewise, to defend, compromise or settle all such actions instituted against him as Receiver, and also to appear in and conduct the prosecution or defense of, or compromise or settle any actions, proceedings or suits now pending or which may hereafter be brought in any court or before any officer, department, commission or tribunal, to which the defendant Hartford Empire Company is or shall be a party, and which in the judgment of the said Receiver, affects or may affect the property of which he is hereby appointed Receiver, but no payments shall be made by said Receiver

in respect of any such suits, actions or proceedings without the further order or direction of the Court; and no action taken by the Receiver in the defense or settlement of any actions or suits against the defendant the Hartford Empire Company shall have the effect of establishing any claim upon or right in the property or funds in the possession of the Receiver so as to alter or change the existing equities or legal rights of the parties.

4. That within five (5) days from this date the said Receiver execute a bond in the sum of Fifty thousand dollars ($50,000.00) and file the same in the office of the Clerk of this Court, with one or more sureties approved by this Court or one of the judges hereof, for the benefit of whom it may concern, conditioned to the effect that he will well and truly perform the duties of his office, and duly account for all moneys and property which may come into his hands, and abide by and perform all things which he shall be directed by the Court to do.

5. That said Receiver is hereby authorized, in his discretion, from time to time, out of the funds coming into his hands, to pay all taxes due upon the property and to pay the expenses of operating said properties and to pay the wages of employees, and to pay all outstanding pay-checks and wage checks representing labor actually performed or services rendered for the defendant the Hartford Empire Company.

6. That said Receiver shall open books of account and cause to be kept therein due and proper account of the earnings, expenses, receipts and disbursements of the property of which he is hereby appointed Receiver, and shall preserve proper vouchers for all payments made by him on account thereof and shall deposit the moneys coming into his hands in some bank or banks and report to the Court the bank or banks so selected. Receipts from licensees are to be set aside and especially ear-marked as coming from each licensee, and, upon confirmation by the Supreme Court of the decree to be entered herein, such receipts so collected and set aside are to be returned, without interest, to the various licensees.

7. That all persons, firms or corporations having in their possession any of said property of which the Receiver is

hereby appointed, shall deliver said property to said Receiver, and each and every of the officers, directors, agents and employees of said defendants the Hartford Empire Company be and they are hereby required and commanded to forthwith turn over and deliver to said Receiver, or his duly authorized representatives, any and all books of account, vouchers and papers, deeds, leases and contracts, bills, notes, accounts, moneys, or other property, in his hand or under his control, belonging to or in the possession of said Hartford Empire Company or to which it is or may become entitled, and each of said officers, directors, agents and employees is hereby commanded and directed to abide by and conform to such orders as may be given from time to time by said Receiver, or his duly constituted representatives, in conducting the operation of the said property and in the discharge of his duties as Receiver.

8. That the Hartford Empire Company and its officers, directors, agents, attorneys and employees and all other persons claiming to act by virtue of or under said Company, and all other persons, firms and corporations whatsoever and wheresoever situated, located or domiciled, be and they are hereby restrained and enjoined from interfering with, attaching, levying upon or in any manner whatsoever disturbing any portion of the property and premises of which the Receiver is hereby appointed, or from taking possession of or in any way interfering with, the same or any part thereof, or from interfering in any manner to prevent the discharge by said Receiver of his duties or the operation of said property and premises under the orders of this Court.

9. That said Receiver shall retain possession of and continue to discharge the duties or trusts aforesaid until the further order of this Court, and shall from time to time make report of his conduct in the premises, and may from time to time apply to this Court for such other and further order and direction as he may deem necessary and requisite to the due administration of said trust.

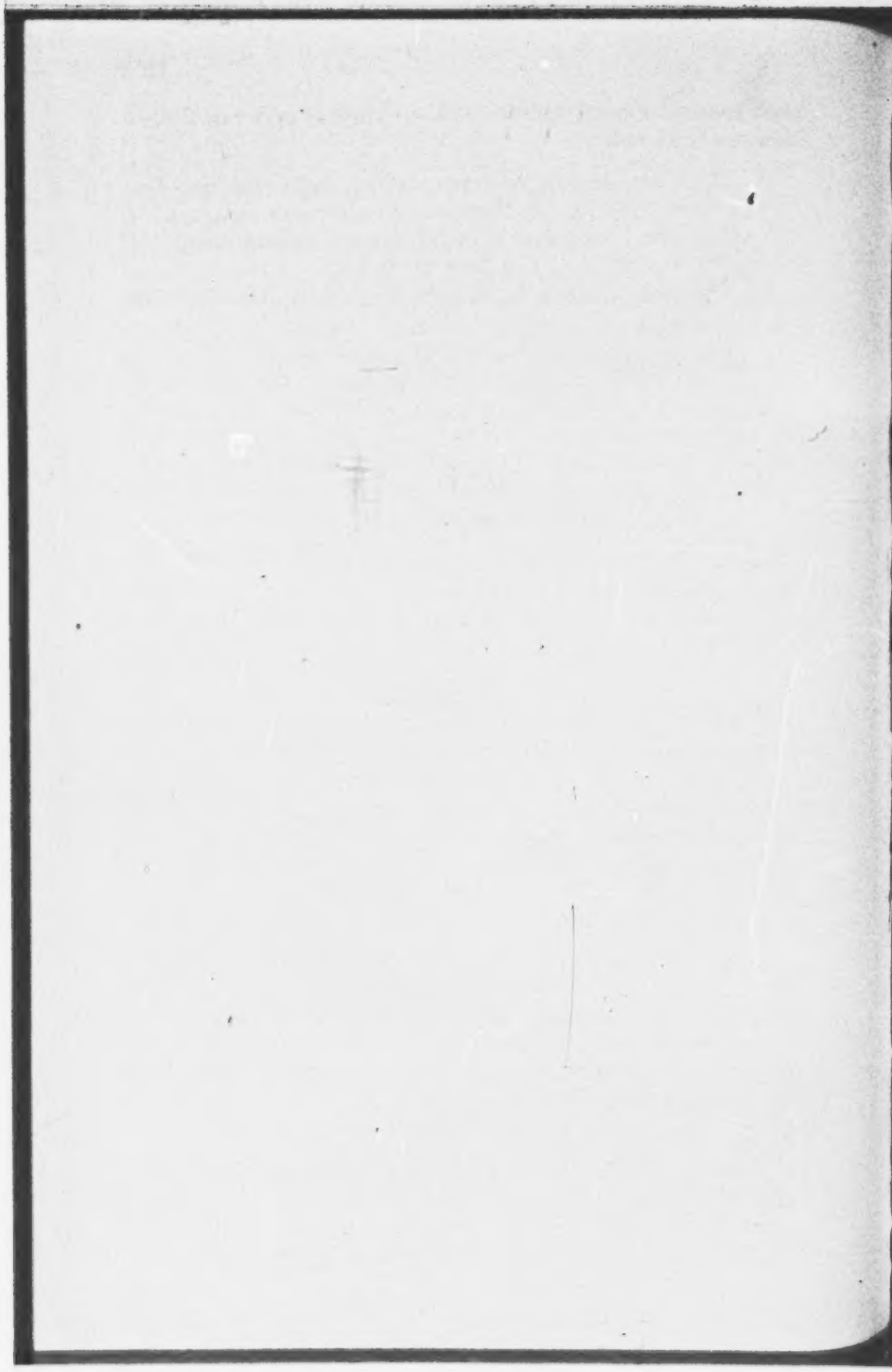
10. In case of the death, resignation or removal of the Receiver hereby appointed, and the appointment of a successor or successors to the Receiver who shall die, resign or be removed, all of the provisions of this order shall apply to

such successor or successors without further order or direction of the Court.

11. The Court hereby reserves the full right and jurisdiction to make from time to time such further orders, amplifying, extending, limiting or otherwise modifying or changing this order as it may at any time deem best.

(Signed) Frank L. Kloeb, United States District Judge.

August 25, 1942.



2-11

IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF OHIO,
WESTERN DIVISION.

CIVIL ACTION No. 4426.

UNITED STATES OF AMERICA,
Plaintiff,

vs.

HARTFORD-EMPIRE COMPANY, *et al.*,
Defendants.

FINAL JUDGMENT

Filed Oct. 8, 1942.

Pandick Press, Inc., 22 Thames St., New York, U. S. A.

In conformity with Rule 77(d) of the Federal Rules of Civil Procedure please take notice that the following order or judgment was entered on 10-8-42. C. B. Watkins, Clerk, U. S. District Court, Northern District of Ohio.

IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF OHIO,
WESTERN DIVISION.

UNITED STATES OF AMERICA,
Plaintiff,

vs.

HARTFORD-EMPIRE COMPANY, *et al.*,
Defendants.

Filed Oct. 8, 1942 P.M.
C. B. Watkins, Clerk
U. S. District Court,
N. D. O.

FINAL JUDGMENT

This cause having come on for final hearing upon the complaint, filed December 11, 1939, and upon the several answers thereto, and the issues thereby presented having been duly tried before the undersigned, Frank L. Kloeb, United States District Judge, and having been argued, and the Court having duly rendered and filed its opinion herein, and having duly made and entered findings of fact and conclusions of law in accordance with Rule 52 of the Federal Rules of Civil Procedure for the District Courts of the United States,

NOW, upon consideration thereof, and upon motion of plaintiff, by Thurman Arnold, Assistant Attorney General, Samuel S. Isseks and Lawrence S. Apsey, Special Assistants to the Attorney General, and by Victor H. Kramer, Seymour D. Lewis and Frank R. Shields, Special Attorneys, for relief in accordance with the prayer of the complaint, and defendant Hartford-Empire Company and the individ-

ual defendants associated therewith having appeared by their attorneys, E. J. Marshall, S. S. Wall, Edgar J. Goodrich and James M. Carlisle; defendants Corning Glass Works, Empire Machine Company and the individual defendants associated therewith having appeared by their attorneys, John B. McMahon, Franklin F. Hayward, Halsey Sayles and William P. Stewart; defendant Owens-Illinois Glass Company and the individual defendants associated therewith having appeared by their attorneys, Lloyd T. Williams, Henry A. Middleton and Edmund P. Wood; defendant Hazel-Atlas Glass Company and the individual defendants associated therewith having appeared by their attorneys, Joseph D. Stecher and Stephen H. Philbin; defendant Thatcher Manufacturing Company and the individual defendants associated therewith having appeared by their attorney, Ralph Emery; defendant Lynch Corporation and the individual defendants associated therewith having appeared by their attorneys, Lehr Fess and Albert Diven; defendant Ball Brothers Company and the individual defendants associated therewith, and G. F. Rieman, having appeared by their attorneys, Wilbur Owen, Carl F. Schaffer, Everett Warner and E. W. McCallister; defendants Glass Container Association of America, Inc., and Charles R. Stevenson and Emory G. Ackerman, having appeared by their attorneys, Luther Day, Rufus S. Day and Chapman Rose; defendants Isaac J. Collins, W. V. Fisher, T. C. Fulton and J. D. Dilworth, having appeared by their attorneys, George D. Welles, Fred E. Fuller, Leslie Henry, Fred A. Smith and H. C. Laughlin, it is hereby

ORDERED, ADJUDGED AND DECREED THAT:

1. (A) Whenever the term "glass containers" is used herein, it shall be deemed to signify the following articles or types of articles when made of glass: narrow neck bottles used as food containers; wide mouth bottles and jars used as food containers; pressed tumblers; beer bottles, other pressure and non-pressure bottles used for beverages; medicine and toilet bottles, including prescription ware;

proprietary ware; perfumery ware and toilet ware; milk and cream bottles; domestic fruit jars; domestic jelly glasses; and all other types of bottles and jars used to contain miscellaneous types of products.

(B) Whenever the term "non-container ware" is used herein it shall be deemed to signify all glass products (other than flat glass, fiberglas, structural glass, glass brick and products made therefrom, and glass containers as defined in subparagraph 1. (A) of this judgment), including, but not limited to, the following articles or types of articles when made of glass in so far as they do not fall within the exceptions above stated: illuminating ware, including bulbs, tubing and cane, optical ware, technical and industrial ware, including parts for electrical devices, insulators and insulation; signal ware; vacuum ware; heat-resistant ware, and oven ware; lamp chimneys and lantern globes; scientific glassware, including laboratory, surgical and hospital ware; tumblers; miscellaneous non-containers; automobile headlight lenses and other automobile signal ware; blown table glassware, including stem ware, tumblers and kindred items, miscellaneous blown non-containers, such as ware for vending and display devices, cylinders, jars, lamp bases, lamp columns, lamp stems and parts, sacramental glassware, acquaria, seed cups, ware for coffee and tea-making devices, and other kindred groups, miscellaneous pressed non-containers, such as table ware, stem ware, tumblers, jars, bar goods, soda-fountain ware, hotel and resturant supply ware, kitchen ware, stationers' ware, and other kindred groups; marbles; and miscellaneous ware, such as novelties, specialties and private-mold articles, and colored art glass.

(C) Whenever the term "glassware" is used herein, it shall be deemed to include both glass containers and non-container ware as defined in subparagraphs 1. (A) and 1. (B) of this judgment.

(D) Except when otherwise expressly provided herein, whenever reference is made to any corporation, whether or not engaged in the manufacture of glassware or of machinery to be used in the manufacture of glassware,

such reference shall be deemed to include, in addition to the corporation referred to, any corporation engaged in the manufacture of glassware or of machinery to be used in the manufacture of glassware which (a) is controlled, directly or indirectly, through stock ownership or otherwise by the corporation referred to or (b) is a subsidiary, successor, parent, or subsidiary of a parent of the corporation referred to.

(E) Whenever the term "subsidiary" is used herein, it shall be construed to refer to any corporation or association of which fifty per cent (50%) or more of the voting capital stock or equivalent voting power is held by a corporate defendant herein.

(F) As used herein, the term "machinery used in the manufacture of glassware" shall be deemed to signify feeders, forming machines, suction machines, lehrs, and stackers, as defined in subparagraphs (G), (H), (I), (J) and (K) of this paragraph 1 of this judgment.

(G) "Feeders" shall mean any and all types of apparatus for or embodying methods of feeding molten glass from furnaces to forming machines, together with all auxiliary and accessory parts of said apparatus, when designed to be used in connection with any such apparatus.

(H) "Forming machines" shall mean any and all types of apparatus for or embodying methods of forming glass by blowing, pressing, blowing and pressing, or drawing the glass; by forming the glass into a ribbon and by causing the glass to progress continuously or intermittently in a given direction along a substantially straight line or to deviate from such straight line while transferring from one straight line to another (including, but not limited to, the 399 or ribbon machine used by defendant Corning Glass Works); together with all auxiliary and accessory parts of all of said apparatus, when designed to be used in connection with any such apparatus.

(I) "Suction machines" shall mean any and all types of apparatus for or embodying methods of raising glass by

suction into molds, and of forming glass, so raised, by blowing, pressing, blowing and pressing, or drawing the glass; by forming the glass so raised into a ribbon and by causing the glass so raised to progress continuously or intermittently in a given direction along a substantially straight line, or to deviate from such straight line while transferring from one straight line to another; together with all auxiliary and accessory parts of all of said apparatus, including, but not limited to, the stationary and revolving pots, when designed to be used in connection with any such apparatus.

(J) "Lehrs" shall mean any and all types of apparatus for or embodying methods of annealing glassware, together with all auxiliary and accessory parts of said apparatus, when designed to be used in connection with any such apparatus.

(K) "Stackers" shall mean any and all types of apparatus for or embodying methods of stacking glassware from a forming machine, suction machine or conveyor in a lehr, together with all auxiliary and accessory parts of said apparatus, when designed to be used in connection with any such apparatus.

(L) The terms "patents" and "patent applications" shall mean United States Letters Patent and applications for United States Letters Patent, respectively.

(M) The term "methods" shall include all methods for the transmission of glass from the furnace to other machinery or apparatus used in the manufacture of glassware, and all methods of forming, annealing, or stacking glassware.

(N) The term "applicant" shall mean a citizen of the United States or a corporation organized under the laws of the United States, the District of Columbia, or of any state or territory of the United States.

2. The Court has jurisdiction of the subject matter hereof and of all parties hereto; the complaint states claims for relief against the defendants under the Act of July 2,

1890, entitled, "An Act to Protect Trade and Commerce against Unlawful Restraints and Monopolies," commonly known as the Sherman Antitrust Act, and under Section 3 of the Act of October 15, 1914, entitled, "An Act to Supplement Existing Laws against Restraints and Monopolies, and for Other Purposes," commonly known as the Clayton Act.

3. The defendant Hartford-Empire Company and defendants F. Goodwin Smith, Bartlett Arkell, Alexander D. Falck, Robson D. Brown, Roger M. Eldred, Karl E. Peiler, Arthur T. Safford, Jr., Theodore L. Champeau, A. M. Pease, Amory Houghton, Arthur A. Houghton, Jr., and Isaac J. Collins (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Hartford-Empire Company); the defendant Empire Machine Company and defendants Alexander D. Falck, Amory Houghton, Arthur A. Houghton, Jr., and Arthur L. Day (such individual defendants being hereinafter collectively referred to as the individual defendants associated with the Empire Machine Company); the defendant Corning Glass Works and defendants Alexander D. Falck, Amory Houghton, Arthur A. Houghton, Jr., Arthur L. Day, Eugene C. Sullivan, William H. Curtiss, and J. L. Peden (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Corning Glass Works); the defendant Owens-Illinois Glass Company and defendants William E. Levis, E. F. Martin, John H. McNerney, R. H. Barnard, C. B. Belknap, Harold Boeschenstein, W. H. Boshart, H. E. Collin, George P. Greenhalgh, W. W. Knight, F. H. McAdoo, C. J. Root, and F. W. Schwenck (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Owens-Illinois Glass Company); the defendant Hazel-Atlas Glass Company and defendants J. Harrison McNash, Walter H. McClure, George S. Quay, L. C. Paull, H. W. Gee, William W. Holloway, and B. H. Seabright (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Hazel-Atlas Glass Company); the defendant Thatcher Manufacturing

Company and defendants H. C. Mandeville, R. W. Niver, E. F. Wellinghoff, S. G. H. Turner, Jervis Langdon, W. H. Mandeville, F. W. Swan, and Stanton Griffis (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Thatcher Manufacturing Company); the defendant Lynch Corporation and defendants J. L. Watts, Uz McMurtrie, N. M. McCullough, Thomas Chandler Werbe, E. G. Bridges, and A. G. Doll (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Lynch Corporation); the defendant Ball Brothers Company and defendants Frank Clayton Ball, George A. Ball, W. H. Ball, Edmund F. Ball, and Fred J. Petty (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Ball Brothers Company); the defendant Glass Container Association of America, Inc., and defendants Charles R. Stevenson and Emory G. Ackerman (such individual defendants being hereinafter collectively referred to as the individual defendants associated with Glass Container Association of America, Inc.,); and defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, have contracted, combined, and conspired to restrain trade, and have monopolized, attempted to monopolize, combined and conspired to monopolize trade, in violation of Sections 1 and 2 of the Sherman Antitrust Act.

4. The defendants Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth,

W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, have monopolized, attempted to monopolize, combined and conspired to monopolize, and contracted, combined, and conspired to restrain trade in violation of Sections 1 and 2 of the Sherman Antitrust Act with respect to patents covering inventions embodied in machinery used in the manufacture of glassware and with respect to machinery used in the manufacture of glassware.

5. The defendants Corning Glass Works, and the individual defendants associated therewith; Hartford-Empire Company, and the individual defendants associated therewith; and Empire Machine Company, and the individual defendants associated therewith; and each of them, have monopolized, attempted to monopolize, combined and conspired to monopolize, and contracted, combined, and conspired to restrain trade in violation of Sections 1 and 2 of the Sherman Antitrust Act with respect to the manufacture of laboratory, electrical, paste mold, signal, optical, oven ware, chemical-resistant and heat-resistant ware, and bulbs, tubing and cane.

6. The defendants Hartford-Empire Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Glass Container Association of America, Inc., and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, have monopolized, attempted to monopolize, combined and conspired to monopolize, and contracted, combined, and conspired to restrain trade in violation of Sections 1 and 2 of the Sherman Antitrust Act with respect to the manufacture of glass containers.

7. The defendants Hartford-Empire Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; and Thatcher Manufacturing Company, and the individual defendants associated therewith; and each of them, have monopolized, attempted to monopolize, combined and conspired to monopolize, and contracted, combined, and conspired to restrain trade in violation of Sections 1 and 2 of the Sherman Antitrust Act with respect to the manufacture of milk bottles.

8. The defendants Hartford-Empire Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; and Ball Brothers Company, and the individual defendants associated therewith, have monopolized, attempted to monopolize, combined and conspired to monopolize, and contracted, combined, and conspired to restrain trade in violation of Sections 1 and 2 of the Sherman Antitrust Act with respect to the manufacture of fruit jars.

9. The defendants Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; Glass Container Association of America, Inc., and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, and all persons and corporations acting and claiming

to act on behalf of them, be and they hereby are enjoined from monopolizing, attempting to monopolize, combining and conspiring to monopolize, or agreeing, combining, or conspiring to restrain trade as charged in the complaint herein in violation of the Sherman Antitrust Act and the Clayton Act and be and they hereby are enjoined from engaging in or participating in practices, contracts, relationships, or understandings, or claiming any rights thereunder, having a tendency to continue or revive any of the aforesaid violations of the Sherman Antitrust Act and the Clayton Act.

10. James A. Shanley, of New Haven, Connecticut, by order dated August 25, 1942, having been appointed Receiver of all and singular the lands, property, assets, rights and franchises of the Hartford-Empire Company, including all patents and other property and assets, real, personal and mixed, of whatever kind or description and wherever situated, owned, leased or operated by said Hartford-Empire Company, with all shops and other buildings and appurtenances of every kind, and all tools, machinery, furniture, fixtures, materials and supplies, and all books of account, records and other books, papers, cash in bank, and all other moneys, all debts, things in action, credits, stocks, bonds, securities, deeds, leases, contracts, muniments of title, bills receivable, accounts receivable, rents, issues, profits and income accruing and to accrue, as well as all leasehold interest and operating and other contracts, and all rights, interests, easements, privileges and franchises of said Hartford-Empire Company, and all other assets of every kind and description, he is hereby continued as said Receiver, under the bond heretofore furnished, as provided in paragraph thirteen (13) herein.

11. Said Receiver be, and he is hereby authorized, empowered and directed, first—to proceed in carrying out the directions of the Court as specified in this judgment and in such further orders as the Court may make; second, to run, manage, maintain and operate all and singular said assets

and properties of said Hartford-Empire Company wherever situated or found, whether in this State, Judicial District or elsewhere, including such properties and assets as the said Hartford-Empire Company holds, controls or operates under lease, trust agreements or otherwise, and to use, manage and conduct such business in such manner, in his judgment as will produce the best results, and to this end, exercise the authority of the said Hartford-Empire Company and discharge all public duties obligatory upon it, and to preserve said property and assets in proper condition and manage and operate said property according to the requirements of the valid laws of the various States in which the same are situated, and in the same manner that the defendant Hartford-Empire Company would be bound to do if in possession thereof, and to employ and discharge and fix the compensation of all officers, managers, superintendents, agents and employees, and to make such payments and disbursements as may be needful and proper in so doing, and to collect and receive the income and tolls of said property, including the dividends on stock and interest upon bonds or other securities, and to hold and retain the net revenues thereof, in such manner and to the end that the same may be applied, under this order and such orders as the Court may hereafter make.

12. The said Receiver be, and he is hereby authorized and empowered to institute and prosecute within this State or elsewhere, and in his name as Receiver, or in the name of the Hartford-Empire Company, as he may be advised by Counsel, the right to appoint whom, subject to the approval of this Court, has heretofore been granted the said Receiver, all such suits as may be, in his judgment necessary for the proper protection of said property and the discharge of his trust, and, likewise, to defend, compromise or settle all such actions instituted against him as Receiver, and also, with the exception of any appeal which may be taken from this judgment, to appear in and conduct the prosecution or defense of, or compromise or settle any actions, proceedings or suits now pending or which may here-

after be brought in any court or before any officer, department, commission or tribunal, to which the defendant Hartford-Empire Company is or shall be a party, and which in the judgment of the said Receiver affects or may affect the property of which he is hereby appointed Receiver, but no payments shall be made by said Receiver in respect of any such suits, actions or proceedings without the further order or direction of the Court; and no action taken by the Receiver in the defense or settlement of any actions or suits against the defendant Hartford-Empire Company shall have the effect of establishing any claim upon or right in the property or funds in the possession of the Receiver so as to alter or change the existing equities or legal rights of the parties.

13. The said Receiver shall continue on file the bond in the sum of Fifty thousand dollars ($50,000.00) now on file in the office of the Clerk of this Court, for the benefit of whom it may concern, conditioned to the effect that he will well and truly perform the duties of his office, and duly account for all moneys and property which may come into his hands, and abide by and perform all things which he shall be directed by the Clerk to do.

14. Said Receiver is hereby authorized, in his discretion, from time to time, out of the funds coming into his hands, to pay all taxes due upon the property and to pay the expenses of operating said properties and to pay the wages of employees, and to pay all outstanding pay-checks and wage checks representing labor actually performed or services rendered for the defendant the Hartford-Empire Company.

15. Said Receiver shall open books of account and cause to be kept therein due and proper account of the earnings, expenses, receipts and disbursements of the property of which he is hereby appointed Receiver, and shall preserve proper vouchers for all payments made by him on account thereof and shall deposit the moneys coming into his hands in some

bank or banks and report to the Court the bank or banks so selected. Subject to the provisions of paragraph 46 of this judgment with respect to the impounding order, any and all receipts by the Receiver from licensees of royalties derived from the licensing of inventions embodied in methods or machinery used in the manufacture of glassware, whether or not such royalties are paid under contracts, are to be set aside and specially ear-marked as coming from each licensee. If no appeal from this judgment is taken by Hartford-Empire Company, or if an appeal is taken and the judgment is confirmed by the Supreme Court, each of such ear-marked receipts so collected and set aside is to be returned, without interest, to each of the licensees who shall have, or has, paid them to the Receiver, less any amounts paid out by the Receiver for the benefit of any such licensee and properly chargeable and allocable to any such licensee.

16. All persons, firms or corporations having in their possession any of said property of which the Receiver has been appointed, shall deliver said property to said Receiver, and each and every of the officers, directors, agents and employees of said defendants the Hartford-Empire Company be and they are hereby required and commanded to forthwith turn over and deliver to said Receiver, or his duly authorized representatives, any and all books of account, vouchers and papers, deeds, leases and contracts, bills, notes, accounts, moneys, or other property, in his hand or under his control, belonging to or in the possession of said Hartford-Empire Company or to which it is or may become entitled, and each of said officers, directors, agents and employees is hereby commanded and directed to abide by and conform to such orders as may be given from time to time by said Receiver, or his duly constituted representatives, in conducting the operation of the said property and in the discharge of his duties as Receiver.

17. The defendant Hartford-Empire Company and its officers, directors, agents, attorneys and employees and all

other persons claiming to act by virtue of or under said Company, and all other persons, firms and corporations whatsoever and wheresoever situated, located or domiciled, be and they hereby are restrained and enjoined from interfering with, attaching, levying upon or in any manner whatsoever disturbing any portion of the property and premises of which the Receiver has been appointed, or from taking possession of or in any way interfering with, the same or any part thereof, or from interfering in any manner to prevent the discharge by said Receiver of his duties or the operation of said property and premises under the orders of this Court.

18. Said Receiver shall retain possession of said properties and continue to discharge the duties or trusts aforesaid until the further order of this Court, and shall from time to time make report of his conduct in the premises, and may from time to time apply to this Court for such other and further order and direction as he may deem necessary and requisite to the due administration of said trust.

19. Said Receiver shall continue to remain in control of defendant Hartford-Empire Company and all of its assets and other property until the Court is: (1) satisfied that violations of the Sherman Antitrust and Clayton Acts by defendant Hartford-Empire Company have ceased; (2) satisfied that its orders in this case have been carried out by defendant Hartford-Empire Company; and (3) satisfied that there no longer remains a reasonable probability that the practices found illegal by it will be resumed by defendant Hartford-Empire Company. If, at any time, the Receiver or the Attorney General concludes that the provisions of this decree are not operating to eliminate the practices of Hartford-Empire Company found by this Court to be illegal, the Receiver shall, upon application to the Court, and on notice to the Attorney General of the United States and to Hartford-Empire Company, or the Attorney General, on notice to Hartford-Empire Company and the Receiver, shall submit a plan or plans for the dissolution of Hartford-Empire Company.

20. In case of the appointment of a successor or successors to the Receiver upon his death, resignation or removal, or upon the appointment of an additional Receiver, all of the applicable provisions of this judgment shall apply to such successor or successors or to such additional Receiver, without further order or direction of this Court.

21. Each of the defendants, Hartford-Empire Company and the individual defendants associated therewith, Corning Glass Works and the individual defendants associated therewith, Empire Machine Company and the individual defendants associated therewith, Owens-Illinois Glass Company and the individual defendants associated therewith, Hazel-Atlas Glass Company and the individual defendants associated therewith, Thatcher Manufacturing Company and the individual defendants associated therewith, Lynch Corporation and the individual defendants associated therewith, Ball Brothers Company and the individual defendants associated therewith, and J. D. Dilworth, W. V. Fisher, T. C. Fulton and G. F. Rieman, who hereafter shall engage or continue to engage in the business of distributing machinery used in the manufacture of glassware in interstate commerce, be and hereby is enjoined from leasing or otherwise distributing or surrendering possession of said machinery by means other than by an outright sale for cash or on credit not to extend over a period of more than two years.

22. The defendant Hartford-Empire Company and the individual defendants associated therewith be and they hereby are enjoined from engaging in the distribution of machinery used in the manufacture of glassware in interstate commerce unless Hartford-Empire Company and its Receiver shall offer, in writing, to sell to each of the respective lessees in possession thereof, all the machinery used in the manufacture of glassware owned by Hartford-Empire Company and now under lease by it to such lessee, at reasonable prices, provided that in determining what shall be considered a reasonable price, there shall be taken into

consideration the license or other rental fee heretofore paid to Hartford-Empire Company by such lessee, and the royalties, if any, heretofore paid to Hartford-Empire Company for the use of the inventions embodied in said machinery. If any dispute arises between Hartford-Empire Company or its Receiver and any of its lessees as to the price at which Hartford-Empire shall sell such machinery to the lessee, such dispute shall be determined by this Court on application by either the lessee, Hartford-Empire Company or its Receiver, on thirty (30) days' notice to the other party to the dispute and to the Attorney General of the United States.

23. The defendant Hartford-Empire Company and the individual defendants associated therewith, Corning Glass Works and the individual defendants associated therewith, Empire Machine Company and the individual defendants associated therewith, Owens-Illinois Glass Company and the individual defendants associated therewith, Hazel-Atlas Glass Company and the individual defendants associated therewith, Thatcher Manufacturing Company and the individual defendants associated therewith, Lynch Corporation and the individual defendants associated therewith, Ball Brothers Company and the individual defendants associated therewith, and J. D. Dilworth, W. V. Fisher, T. C. Fulton and G. F. Rieman, each be and hereby is enjoined from engaging in the distribution of machinery used in the manufacture of glassware or in the distribution of glassware in interstate commerce, unless they, and each of them, while engaging in or continuing to be engaged in the distribution of machinery used in the manufacture of glassware in interstate commerce, shall, by written instrument filed with the Clerk of this Court, agree to offer and continue to offer to sell such machinery to any applicant (including, but not limited to, those not heretofore engaged in the manufacture of glassware) at reasonable and equal prices and upon reasonable and equal terms and conditions of sale to each applicant, provided that said sales are not hereby required to be made to any applicant not having a

proper credit rating, unless said applicant offers to pay cash; provided, however, that nothing in this paragraph 23 shall be construed to prevent changes in price structure based upon a change in economic or market conditions if notice of at least thirty (30) days of any such change in price structure is first given to the glassware industry; and provided further that any applicant to whom any of said defendants refuses to sell said machinery as heretofore provided in thir paragraph may apply to this Court, on thirty (30) days' notice only to the defendant which shall have refused to make said sale and to the Attorney General of the United States of America, for an order requiring and directing said defendant to make such sale.

24. The defendant Hartford-Empire Company and the individual defendants associated therewith, Corning Glass Works and the individual defendants associated therewith, Empire Machine Company and the individual defendants associated therewith, Owens-Illinois Glass Company and the individual defendants associated therewith, Hazel-Atlas Glass Company and the individual defendants associated therewith, Thatcher Manufacturing Company and the individual defendants associated therewith, Lynch Corporation and the individual defendants associated therewith, Ball Brothers Company and the individual defendants associated therewith, and J. D. Dilworth, W. V. Fisher, T. C. Fulton and G. F. Rieman, each be and hereby is enjoined from engaging in the distribution of machinery used in the manufacture of glassware or in the distribution of glassware in interstate commerce unless he or it shall, by instrument filed with the Clerk of this Court within thirty (30) days from the effective date of this decree:

(a) agree to license without royalty or charge of any kind and for the life of the patents any applicant to make, to have made for it and to use any number of machines and methods used in the manufacture of glassware and embodying inventions covered by any patents or patent applications now owned or controlled by each of such defendants;

(b) agree to license, at a reasonable royalty, any applicant to make, have made for it, and to use any number of machines and methods used in the manufacture of glassware and embodying inventions covered by any patents granted on patent applications filed subsequent to the date of this judgment, and then owned or controlled by each of such defendants; and

(c) agree to make available to any licensee under sub-paragraphs (a) and (b) of this paragraph, a copy (at a cost not to exceed the cost of preparing the copy plus a reasonable profit) of any and all drawings and patterns owned or controlled by the respective defendant relating to the machinery or methods used in the manufacture of glassware embodying licensed inventions but this sub-paragraph shall not apply to Lynch type forming machines for the production of narrow neck glass containers.

If any dispute arises between any applicant for a license or licensee and any defendant under paragraphs (a), (b) or (c) of this paragraph 24, such dispute shall be determined by this Court on petition by either such applicant or licensee or the defendant involved, on thirty (30) days' notice to the other party to the dispute and to the Attorney General of the United States.

25. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works and the individual defendants associated therewith; Empire Machine Company and the individual defendants associated therewith; Owens-Illinois Glass Company and the individual defendants associated therewith; Hazel-Atlas Glass Company and the individual defendants associated therewith; Thatcher Manufacturing Company and the individual defendants associated therewith; Lynch Corporation and the individual defendants associated therewith; Ball Brothers Company and the individual defendants associated therewith; and the defendants J. D.

Dilworth, W. V. Fisher, T. C. Fulton and G. F. Rieman; and each of them, whenever regularly engaged in the manufacture and distribution of machinery used in the manufacture of glassware in interstate commerce, be and hereby is enjoined from discriminating, by means of wholly exclusive or partially exclusive requirement contracts with glassware manufacturing companies or otherwise, against any manufacturer of glassware, present or prospective, in the filling of orders for such machinery on the basis of the size of the order, the credit position of the customer (providing the customer pays cash), his standing in the industry or otherwise; and each of the said defendants be and hereby is perpetually enjoined and restrained (provided nothing in this paragraph 25 shall prohibit a defendant from obtaining a contract or from enforcing contractual or other rights which are not otherwise prohibited by the terms of this judgment) from directly or indirectly agreeing, conspiring or combining with any other person, firm, or corporation for the purpose of obstructing or delaying the furnishing of any such machinery to any such customer or applicant.

26. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works and the individual defendants associated therewith; Empire Machine Company and the individual defendants associated therewith; Owens-Illinois Glass Company and the individual defendants associated therewith; Hazel-Atlas Glass Company and the individual defendants associated therewith; Thatcher Manufacturing Company and the individual defendants associated therewith; Lynch Corporation and the individual defendants associated therewith; Ball Brothers Company and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them be and they hereby are enjoined, until the entry of a finding by this Court, after petition filed by such defendants on thirty days' notice to the Attorney General of the United States and a hearing thereon, that

the consequences of the conduct of such defendants in violation of the Sherman Antitrust Act and the Clayton Act have been fully dissipated, from:

(a) bringing, maintaining, or taking any action in pursuance of any suit or suits for infringement of any patent or patents now owned or controlled by any such defendant, or hereafter issued on pending applications now owned or controlled by any such defendant, covering inventions embodied in machinery used in the manufacture of glassware;

(b) attempting to interfere by suit or otherwise with the possession of machinery used in the manufacture of glassware now owned or claimed to be owned by any such defendant and which machinery is in the possession of a licensee or lessee of such defendant except in so far as may be necessary to enforce the terms of any contract of sale entered into pursuant to paragraph 21 of this judgment; and

(c) attempting by suit or otherwise to collect royalties or license fees or profits for the use of inventions covered by patents now issued or hereafter issued on applications now pending embodied in machinery used in the manufacture of glassware licensed or leased by any such defendant.

27. The agreement dated June 30, 1916 between Hartford-Fairmont Company and Empire Machine Company; the agreement dated October 26, 1922 between Hartford-Empire Company, Hartford-Fairmont Company, Empire Machine Company, Corning Glass Works and others; the agreement dated September 23, 1940 between Hartford-Empire Company, Corning Glass Works and Empire Machine Company; the agreement dated December 1, 1940 between Hartford-Empire Company and Corning Glass Works, the assignment by Hartford-Empire Company to Corning Glass Works dated September 23, 1940 of three (3) certain patents (specifically excluding the so-called Agreement for Formation of Hartford-Empire Company

dated October 6, 1922; the so-called Refractories Formation Agreement and the so-called Refractories Stock Agreement, both executed under date of April 1, 1927 by and between Hartford-Empire Company and Corning Glass Works, and any and all amendments to each of the two (2) last mentioned agreements); the agreement dated April 9, 1924 between Hartford-Empire Company, Hartford-Fairmont Company and The Owens Bottle Company, the Graham Glass Company and the Charles Boldt Glass Company; all agreements dated July 1, 1932, September 30, 1935 and October 1, 1935 between Hartford-Empire Company and Owens-Illinois Glass Company and its subsidiaries; all agreements dated July 1, 1932 between Hartford-Empire Company and Hazel-Atlas Glass Company and its subsidiaries; all agreements dated July 1, 1932 and October 3, 1935 between Owens-Illinois Glass Company and its subsidiaries, and Hazel-Atlas Glass Company and its subsidiaries; the agreements dated December 8, 1920, April 13, 1928 and January 1, 1936 between Hartford-Fairmont Company or Hartford-Empire Company and Thatcher Manufacturing Company; the agreements dated March 25, 1933 and August 1, 1940 between Hartford-Empire Company and Ball Brothers Company; the agreements dated August 23, 1933 and September 18, 1940 between Hartford-Empire Company and Lynch Corporation, together with all amendments to and leases or licenses issued under each of said agreements and every other agreement (not above specifically excluded) between Owens-Illinois Glass Co. and Hazel-Atlas Glass Co. or between Hartford-Empire Company and each of the other defendant corporations (in so far as any of the agreements above referred to have not heretofore been cancelled or terminated) be and they hereby are declared unlawful and be and they hereby are cancelled, and the observance in any respect of each of such agreements, leases, licenses, and amendments thereto is hereby enjoined; and each of the defendants which is party to any of the agreements, leases, licenses, or amendments cancelled by this paragraph 27 be and hereby is directed to cause any of its subsidiaries which are also party to any of such

agreements, leases, licenses, or amendments to assent in writing to the cancellation thereof.

28. Each agreement, together with all amendments thereto, relating to the leasing of machinery used in the manufacture of glassware, or the licensing of patented inventions embodied in machinery used in the manufacture of glassware, between Hartford-Empire Company and each of its licensees, be and it hereby is cancelled as of a date thirty (30) days subsequent to the effective date of this judgment, and the observance after such cancellation, by Hartford-Empire Company, its officers, directors, agents, and employees, in any respect of any of such agreements, leases, licenses, and amendments thereto, is hereby enjoined. The Receiver is hereby directed within thirty (30) days after the effective date of this decree to notify all licensees of Hartford-Empire Company of the cancellation of said licenses and to offer them new licenses and to offer to sell said machinery to said licensees, all in accordance with the terms of this judgment, after furnishing a copy of all such proposed new licenses to the Attorney General and to the Hartford-Empire Company, and thereafter obtaining the approval of this Court as to the form of such licenses. If either the Attorney General or the Hartford-Empire Company shall object to the proposed form of any such new licenses, they may be heard by this Court prior to final determination as to the form thereof.

29. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual de-

fendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, be and hereby is enjoined from inserting or enforcing or requiring any other party to agree to any provision in any agreement heretofore or hereafter entered into by him or it which

(a) directly or indirectly limits or restricts

(1) the type or kind of product (whether glassware as defined in subparagraph 1 (C) of this judgment or any other product whatsoever) which can be produced with or upon machines or equipment or processes embodying inventions licensed under patents or patent applications owned or controlled by him or it, (2) the use of such product so produced, (3) the character, weight, color, capacity, or composition of the product so produced, (4) the quantity thereof so produced, (5) the market (either as to territory, customers, or class of customers) to or in which the same may be sold or distributed, (6) the price or terms of sale or other disposition of such products, or (7) the use of any machinery or equipment distributed, or patented inventions licensed, by him or it, to use in connection with any other machinery or equipment distributed, or inventions licensed, by him or it, or to use in any specified plant or locality; or

(b) gives or purports to give a right to terminate any license if any machinery or equipment is not so used; or

(c) which expressly provides that any licensee shall not contest the validity of any patent or patents of such defendant; or

(d) provides that parts and equipment constituting improvements on leased or sold machinery, made by the licensee, shall become the property of the lessor or vendor; or

(e) provides that rights to improvements, including inventions, patent applications and patents covering licensed inventions embodied in machinery or processes or methods made or acquired by the licensee, shall become the exclusive property of the lessor or vendor; or

(f) grants to any licensee, lessee or vendee of any product, machine, or equipment, when such product, machine or equipment embodies inventions covered by patents or patent applications owned or controlled by it or him, a preferential position, whether by means of lower rates of royalty, by different provisions of licensing, leasing, or sale, by exclusive licenses, rebates, discounts, a share in net or gross income or any part thereof, or by any other means.

30. The defendants, Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, their officers, directors, agents and employees be and hereby are enjoined from entering into any agreement with Hartford-Empire Company containing any of the provisions enumerated in paragraph 29 of this judgment.

31. The form of any agreement between any of the defendants and of any license agreement made pursuant to this judgment and to which any of the defendants is a party, shall be subject to the approval of this Court, on petition by any defendant proposing to enter into such an agreement, on ten (10) days' notice to the Attorney General; provided,

however, that it shall be unnecessary to obtain the approval of the Court as to the form of any agreement which is identical (except as to parties, dates, number, and types of machines involved) with any form theretofore approved by the Court.

32. The defendants Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; Glass Container Association of America, Inc., and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, are hereby enjoined from requiring, requesting or inducing Hartford-Empire Company or its officers, directors, agents or employees to seek the permission, advice or consent of said defendants or any of them before licensing newcomers in the glassware industry, or before allowing then existing licensees of Hartford-Empire Company to manufacture additional types, kinds or amounts of glassware.

33. Each of the individual defendants, F. Goodwin Smith, Bartlett Arkell, Alexander D. Falck, Robson D. Brown, Roger M. Eldred, Karl E. Peiler, Arthur T. Safford, Jr., Theodore L. Champeau, A. M. Pease, Amory Houghton, Arthur A. Houghton, Jr., Arthur L. Day, Isaac J. Collins, Eugene C. Sullivan, William H. Curtiss, J. L. Peden, William E. Levis, E. F. Martin, John H. McNerney, R. H. Barnard, C. B. Belknap, Harold Boeschenstein, W. H. Boshart, H. E. Collins, George P. Greenhalgh, W. W. Knight, F. H. McAdoo, C. J. Root, F. W. Schwenck, J. Harrison McNash, Walter H. McClure, George S. Quay,

L. C. Paull, H. W. Gee, William W. Holloway, B. H. Seabright, H. C. Mandeville, R. W. Niver, E. F. Wellinghoff, S. G. H. Turner, Jervis Langdon, W. H. Mandeville, F. W. Swan, Stanton Griffis, J. L. Watts, Uz McMurtrie, N. M. McCullough, Thomas Chandler Werbe, E. G. Bridges, A. G. Doll, Frank Clayton Ball, George A. Ball, W. H. Ball, Edmund F. Ball, Fred. J. Petty, Charles R. Stevenson, Emory G. Ackerman, J. D. Dilworth, W. V. Fisher, T. C. Fulton, G. F. Rieman, be and he hereby is enjoined from holding or controlling, directly or indirectly, or through corporations, agents, trustees, representatives, or nominees, any of the issued and outstanding capital stock, bonds or other evidences of indebtedness of more than one (1) corporation engaged either in the manufacture and sale of glassware or in the manufacture or distribution of machinery used in the manufacture of glassware or in both; provided, however, that this paragraph 33 shall not apply to the holding of stock by any individual defendant solely in a fiduciary capacity for the benefit of a person or persons other than defendants herein and that no defendant so holding stock in a fiduciary capacity shall exercise any voting rights with respect to such stock or give any proxy to vote the same; and further provided that nothing in this paragraph 33 shall apply to the holding by any individual defendant of stock, bonds, or other evidences of indebtedness in any subsidiary, parent, or subsidiary of the parent of a corporation in which he is an officer, director, agent or employee, or in a corporation solely engaged in business outside the territorial limits of the United States of America or its territories, provided further that such of the defendants Isaac J. Collins, J. D. Dilworth, W. V. Fisher, T. C. Fulton, Alexander D. Falck, Amory Houghton, Arthur A. Houghton, Jr., and William E. Levis, if any, as may be required by this paragraph of this judgment to divest themselves of any stock, shall be permitted to divest themselves thereof over a period of not more than two (2) years from the effective date of this judgment; provided further that such of the defendants as may be required by

this paragraph to divest themselves of any stock, bonds, or other evidences of indebtedness, shall submit to the Court, with notice to the Attorney General, a written statement containing the name or names of those to whom said stock, bonds, or other evidences of indebtedness has been sold or otherwise transferred.

34. Each of the individual defendants F. Goodwin Smith, Bartlett Arkell, Alexander D. Falck, Robson D. Brown, Roger M. Eldred, Karl E. Peiler, Arthur T. Safford, Jr., Theodore L. Champeau, A. M. Pease, Amory Houghton, Arthur A. Houghton, Jr., Arthur L. Day, Isaac J. Collins, Eugene C. Sullivan, William H. Curtiss, J. L. Peden, William E. Levis, E. F. Martin, John H. McNerney, R. H. Barnard, C. B. Belknap, Harold Boeschenstein, W. H. Boshart, H. E. Collin, George P. Greenhalgh, W. W. Knight, F. H. McAdoo, C. J. Root, F. W. Schwenck, J. Harrison McNash, Walter H. McClure, George S. Quay, L. C. Paull, H. W. Gee, William W. Holloway, B. H. Seabright, H. C. Mandeville, R. W. Niver, E. F. Wellinghoff, S. G. H. Turner, Jervis Langdon, W. H. Mandeville, F. W. Swan, Stanton Griffis, J. L. Watts, Uz McMurtrie, N. M. McCullough, Thomas Chandler Werbe, E. G. Bridges, A. G. Doll, Frank Clayton Ball, George A. Ball, W. H. Ball, Edmund F. Ball, Fred. J. Petty, Charles R. Stevenson, Emory G. Ackerman, J. D. Dilworth, W. V. Fisher, T. C. Fulton, G. F. Rieman, who has, on or subsequent to December 11, 1939, sold or otherwise transferred ownership or control of stock, bonds, or other evidences of indebtedness of any corporation engaged in the manufacture and sale of glassware or in the manufacture or distribution of machinery used in the manufacture of glassware, other than the one of which he was an officer or director at the time of such transfer, shall within ten (10) days of the effective date of this judgment submit to the Court, with notice to the Attorney General, a written statement containing the name or names of those to whom the stock, bonds, or other evidences of indebtedness was sold or otherwise transferred; provided that each of the defendants

Alexander D. Falck, Amory Houghton and Arthur A. Houghton, Jr., shall submit such a list containing the name or names, if any, of those to whom he has, since December 11, 1939, transferred any of the stock theretofore held by him in Hartford-Empire Company, Empire Machine Company and Corning Glass Works.

35. Each of the individual defendants F. Goodwin Smith, Bartlett Arkell, Alexander D. Falck, Robson D. Brown, Roger M. Eldred, Karl E. Peiler, Arthur T. Safford, Jr., Theodore L. Champeau, A. M. Pease, Amory Houghton, Arthur A. Houghton, Jr., Arthur L. Day, Isaac J. Collins, Eugene C. Sullivan, William H. Curtiss, J. L. Peden, William E. Levis, E. F. Martin, John H. McNerney, R. H. Barnard, C. B. Belknap, Harold Boeschenstein, W. H. Boshart, H. E. Collin, George P. Greenhalgh, W. W. Knight, F. H. McAdoo, C. J. Root, F. W. Schwenck, J. Harrison McNash, Walter H. McClure, George S. Quay, L. C. Paull, H. W. Gee, William W. Holloway, B. H. Seabright, H. C. Mandeville, R. W. Niver, E. F. Wellinghoff, S. G. H. Turner, Jervis Langdon, W. H. Mandeville, F. W. Swan, Stanton Griffis, J. L. Watts, Uz McMurtrie, N. M. McCullough, Thomas Chandler Werbe, E. G. Bridges, A. G. Doll, Frank Clayton Ball, George A. Ball, W. H. Ball, Edmund F. Ball, Fred. J. Petty, Charles R. Stevenson, Emory G. Ackerman, J. D. Dilworth, W. V. Fisher, T. C. Fulton, G. F. Rieman, be and he hereby is enjoined from holding at the same time an office or directorship in more than one corporation engaged either in the manufacture and sale of glassware or in the manufacture or distribution of machinery to be used in the manufacture of glassware; provided, that the provisions of this paragraph 35 shall not restrain or preclude an officer or director of any of the defendant corporations herein from simultaneously acting as officer or director of a subsidiary, parent, or subsidiary of the parent of the corporation of which he is so acting as officer or director, or of a corporation engaged solely in business outside of the territorial limits of the United States of America or its territories.

36(A). The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them, while engaged either in the manufacture and sale of glassware or in the manufacture or distribution of machinery to be used in the manufacture of glassware, or both, be and hereby is perpetually enjoined from acquiring, purchasing, holding, or controlling, directly or indirectly, or through agents, representatives, or nominees, any of the assets (except goods or merchandise purchased in the ordinary course of business) or any of the capital stock or bonds or other evidences of indebtedness of any other defendant corporation, except that any individual defendant may hold, own, or acquire capital stock or bonds or other evidences of indebtedness of the defendant corporation of which he is an officer or director.

(B). The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants therewith; and the defendants J. D. Dilworth, W. V.

Fisher, T. C. Fulton, and G. F. Rieman; and each of them, while engaged either in the manufacture and sale of glassware or in the manufacture or distribution of machinery to be used in the manufacture of glassware, or both, be and hereby is perpetually enjoined from acquiring, purchasing, holding or controlling, directly or indirectly, or through agents, representatives, or nominees, any of the assets (except goods or merchandise purchased in the ordinary course of business) or any of the capital stock or bonds or other evidences of indebtedness of any other corporation, firm, or individual so engaged; Provided, however, that this subparagraph (B) of paragraph 36 shall not prevent any of the corporate defendants from continuing to hold capital stock or bonds or other evidences of indebtedness in its own subsidiary, as defined in subparagraph (E) of paragraph 1, or any individual defendant from continuing to hold capital stock or bonds or other evidences of indebtedness in the subsidiary of the defendant corporation of which he is an officer or director, or any of the corporate defendants from continuing to hold or acquiring assets, capital stock, or bonds or other evidences of indebtedness in any corporation engaged solely in business outside of the territorial limits of the United States of America or its territories.

37. The defendants, Glass Container Association of America, Inc., Charles R. Stevenson, Emory G. Ackerman, and the officers, directors, agents, employees and members of the statistical committee of Glass Container Association of America, Inc., and each of them, be and they hereby are enjoined from holding further meetings of said committee and from permitting it to exist or furthering its existence in any way, and from establishing any committee, organization, or group having duties, functions, or activities of a nature similar to or identical with those of said committee; and Glass Container Association of America, Inc., Charles R. Stevenson, Emory G. Ackerman, and the members, stockholders, officers, directors, agents, and employees of Glass Container Association of America, Inc., and each of them,

be and hereby are directed to cause the certificate of incorporation and by-laws of Glass Container Association of America, Inc., to be amended so as to provide for the permanent abolition of the statistical committee, or any committee having duties, functions, or activities of a nature similar to or identical with those of said committee.

38. The defendant Glass Container Association of America, Inc., be and hereby is enjoined from continuing such of its present officers and board of directors who are defendants herein, or who is a director, officer or employee of any defendant corporation, in office and said defendant be and it hereby is directed to submit, on notice to the Attorney General, the names of such officers and directors as may be elected or appointed to succeed such officers and directors to this Court for its approval prior to their taking office.

39. The defendant Glass Container Association of America, Inc., its officers, directors, agents, employees, members, and stockholders, and each of them, are hereby enjoined from hereafter electing, employing, or continuing in office or in the employ of said Association any person who is at the same time either an officer, director, agent, or employee of Hartford-Empire Company, Empire Machine Company, Corning Glass Works, Owens-Illinois Glass Company, Hazel-Atlas Glass Company, Ball Brothers Company, Thatcher Manufacturing Company, or Lynch Corporation; and Glass Container Association of America, Inc., its officers, directors, agents, employees, members, and stockholders be and hereby are directed to cause its certificate of incorporation and by-laws to be amended so as to provide that no person may hold office or employment of any kind in Glass Container Association of America, Inc., who is at the same time either an officer, director, agent, or employee of Hartford-Empire Company, Empire Machine Company, Corning Glass Works, Owens-Illinois Glass Company, Hazel-Atlas Glass Company, Ball Brothers Company, Thatcher Manufacturing Company, or Lynch Corporation.

40. Each of the defendants, Hartford-Empire Company and the individual defendants associated therewith, Corning Glass Works and the individual defendants associated therewith, Empire Machine Company and the individual defendants associated therewith, Owens-Illinois Glass Company and the individual defendants associated therewith, Hazel-Atlas Glass Company and the individual defendants associated therewith, Thatcher Manufacturing Company and the individual defendants associated therewith, Lynch Corporation and the individual defendants associated therewith, Ball Brothers Company and the individual defendants associated therewith, Glass Container Association of America, Inc. and the individual defendants associated therewith, and J. D. Dilworth, W. V. Fisher, T. C. Fulton and G. F. Rieman, and each of the directors, officers, agents and employees, of such of said defendants as are corporations, be and they hereby are enjoined and restrained from

(1) agreeing, combining, or conspiring with any other defendant corporation, its directors, officers, agents, and employees, or with any other manufacturer or seller of glassware or of machinery to be used in the manufacture of glassware, its directors, officers, agents, and employees:

(a) to limit the production of glassware or of machinery used in the manufacture of glassware, or to fix, raise, maintain, or adhere to prices of glassware or of such machinery; or to coerce, intentionally persuade, cause, impel, advise or induce any manufacturer of glassware or of such machinery to limit the production of glassware or of such machinery or to fix, raise, maintain or adhere to prices of glassware or of such machinery;

(b) to ascertain the volume of business of manufacturers of glassware or of machinery used in the manufacture of glassware for any period or periods, or to make forecasts of the estimated demands for different types of glassware or of such machinery, where the purpose or effect thereof is to coerce or

intentionally persuade any manufacturer of glassware or of such machinery to limit or control production or to fix, raise, or maintain the price of glassware or of such machinery;

(c) to collect, compile, analyze, or distribute data concerning the production, sales, orders, shipments, deliveries, costs, or prices of glassware or of machinery used in the manufacture of glassware, where there is any disclosure of data concerning any particular manufacturer or where the purpose or effect is to coerce or intentionally persuade any manufacturer to limit or control production or to fix, raise, or maintain the price of glassware or of such machinery;

(d) to distribute or report any statistics or statistical compilations concerning any aspect of the manufacture and sale of glassware or of machinery used in the manufacture of glassware, other than information bearing directly upon royalty payments owed to or paid to a licensor or dues owed to or paid to a trade association as provided in subdivision (e) of this subparagraph 40 (a), unless such information is made fully and fairly available to the general public at the time of its initial dissemination;

(e) to examine or audit the records or accounts of a manufacturer of glassware or of machinery to be used in the manufacture of glassware, provided, however, that this subparagraph 40 (1)(e) shall not prohibit a licensor of a patent from having an independent auditor examine the records and accounts of a licensee in connection with the collection of royalties where it is made a condition of the employment of such auditor that he disclose only such information to the licensor as is necessary to determine the amount of royalties payable, nor shall subparagraph 40 (1)(e) prohibit an association from having an independent auditor examine the records and accounts of members of the association where it is

made a condition of the employment of such auditor that he disclose only such information to the association as is necessary to determine the amount of dues payable by the member to the association;

(f) to allocate or refrain from soliciting customers of manufacturers of glassware or of machinery used in the manufacture of glassware, or to allocate markets or marketing territories among the several manufacturers;

(2) formulating, promoting, or taking part in any plan with any other corporation for the prorating of business or the equitable sharing of available business; or

(3) distributing data concerning the production, shipments, sales, orders, costs, or prices of any manufacturer of glassware or of machinery to be used in the manufacture of glassware, or presenting or discussing data dealing with sales, orders, costs or prices at meetings, or elsewhere, or by correspondence or otherwise, in such form or manner as to indicate that any manufacturer or manufacturers of glassware or of such machinery has or have exceeded any production quota or failed to adhere, or should conform to any price;

provided, however, that the provisions of this paragraph 40 shall not apply to agreements or discussions solely between officers, directors, or employees of the same corporation, nor shall this paragraph 40 prevent any single defendant corporation in the exercise of its own independent judgment from taking any action lawful under the Miller-Tydings Act.

41. Defendant Owens-Illinois Glass Company, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual de-

fendants associated therewith; and Hartford-Empire Company, and the individual defendants associated therewith; their officers, directors, agents, and employees, and each of them, be and hereby are enjoined from continuing or entering into any agreement or undertaking by or between any of them, or with any other manufacturer or distributor of glassware or of machinery used in the manufacture of glassware, the effect, purpose, or result of which is to restrain or limit whatsoever the production or sale of fruit jars.

42. Defendant Ball Brothers Company, the individual defendants associated therewith, its officers, directors, agents, and employees, and each of them, be and hereby are enjoined from the enforcement of such of the provisions of the agreement dated March 23, 1933, between Ball Brothers Company and Knox Glass Bottle Company, its affiliated companies and Roy R. Underwood, by which Knox Glass Bottle Company, its affiliated companies and Roy R. Underwood, agreed to refrain from manufacturing or selling fruit jars in most of the United States for fifteen years, and from the enforcement of such of the provisions of the agreement dated April 27, 1933, between Ball Brothers Company and Brockway Machine Bottle Company and Robert L. Warren, by which Brockway Machine Bottle Company and Robert L. Warren agreed to refrain from manufacturing or selling fruit jars in most of the United States for fifteen years; and Ball Brothers Company, its officers, directors, agents, and employees, each be and hereby is enjoined from entering into any agreement or understanding with any manufacturer or distributor of glassware or machinery used in the manufacture of glassware, the effect, purpose, or result of which is to restrain or limit whatsoever the production or sale of glass fruit jars.

43. Defendant Ball Brothers Company, its officers and directors, be and hereby are directed to cause Ball Glass Corporation to offer for sale all real estate, factories, machinery, tanks, furnaces, and other assets pertaining to the manufacture of glassware now owned by Ball Glass

Corporation at Three Rivers, County of Live Oak, Texas, at a fair price to be determined by this Court; and Ball Brothers Company be and hereby is directed to cause Ball Glass Corporation to continue to offer for sale and to hold itself in readiness to divest itself completely of all such property when and if the opportunity arises to sell the same to a purchaser and under conditions approved by this Court.

44. Defendant Ball Brothers Company, its officers and directors, be and they hereby are directed forthwith to pay to the Clerk of this Court all moneys received by defendant Ball Brothers Company from defendant Hartford-Empire Company pursuant to the agreement of August 1, 1940, amending the General Feeder License Agreement between defendant Hartford-Empire Company and defendant Ball Brothers Company, to be impounded and held by said Clerk, subject to the further order of this Court, pending the termination of the Receivership of defendant Hartford-Empire Company.

45(A). Defendant Corning Glass Works, its officers and directors, be and they hereby are directed forthwith to pay to the Clerk of this Court all moneys received by defendant Corning Glass Works from defendant Hartford-Empire Company pursuant to the agreements of September 23, 1940 and December 1, 1940, between defendant Hartford-Empire Company and defendant Corning Glass Works, to be impounded and held by said Clerk, subject to the further order of this Court, pending the termination of the Receivership of defendant Hartford-Empire Company; and Hartford-Empire Company and its Receiver be and they hereby are enjoined from making any further payments to Corning Glass Works under said agreements.

(B). Defendant Corning Glass Works, its officers and directors, are hereby directed to assign to defendant Hartford-Empire Company, its successors and assigns, the entire right, title and interest to said defendant Corning

Glass Works in and to each and all of the following three Letters Patent:

Patent No.	Date	Inventor
1,574,736	Feb. 23, 1926	Peiler
1,592,299	July 13, 1926	Howard
Re. 19,439	Jan. 22, 1935	Smith

(Original 1,896,870 dated Feb. 7, 1933)

together with any and all reissues and extensions thereof and the entire right in the United States in and to any and all inventions described and claimed in said Letters Patent.

46. The impounding order entered by this Court in this case on May 9, 1941 be and hereby is continued in force until further order of this Court, pending the termination of the Receivership of defendant Hartford-Empire Company, except that upon cancellation of the July 1, 1932 general License Agreement between Hartford-Empire Company and Hazel-Atlas Glass Company, no further payments shall be made to the Clerk of this Court by Hartford-Empire Company or Hazel-Atlas Glass Company under said order.

47. Defendant Thatcher Manufacturing Company, the individual defendants associated therewith and its officers and directors, agents and employees, and each of them, be and they hereby are enjoined from the enforcement of such of the provisions of the agreement dated August 29, 1919, between defendant Thatcher Manufacturing Company and J. T. & A. Hamilton Company, and all amendments thereto, by which J. T. & A. Hamilton Company agreed to limit or restrict its production of milk bottles to Allegheny County, Pennsylvania, and from the enforcement of such of the provisions of an agreement dated December 5, 1932, between defendant Thatcher Manufacturing Company and Knox Glass Bottle Company by which Knox Glass Bottle Company agreed to refrain from manufacturing milk bottles.

48. Defendants Hartford-Empire Company, the individual defendants associated therewith, and Lynch Corporation, and the individual defendants associated therewith, their respective directors, officers, agents, and employees, and each of them, be and they hereby are enjoined and restrained from recognizing, performing, or asserting any rights under any provision of any agreement, including the agreement between said defendant corporations entered into under date of August 23, 1933, as amended, which limits or restricts the terms upon which, or the customers to whom, Lynch Corporation may sell forming machines embodying or employing inventions owned by Hartford-Empire Company, or which requires purchasers of such machines from Lynch Corporation to enter into forming machine license agreements with Hartford-Empire Company.

49. Lynch Corporation, its officers and directors, be and they hereby are directed to offer for sale two (2) years after the cessation of the hostilities between the United States and Germany, Italy and Japan, all real estate, machinery, patterns, drawings, jigs, tools, dies and other equipment and properties (excepting patents), acquired by defendant Lynch Corporation on August 21, 1933, from Edward Miller doing business as Miller Machine Mold Works, and now owned or controlled by defendant Lynch Corporation or its subsidiaries, together with all other machinery, patterns, drawings, jigs, tools, dies and other equipment and properties (excepting patents), which defendant Lynch Corporation now owns, in so far as they relate exclusively to or are used exclusively in the manufacture of those types of forming machines which were manufactured by Edward Miller prior to August 21, 1933, at a fair price to be approved by this Court; and defendant Lynch Corporation be and it hereby is directed thereafter to continue to offer for sale and to hold in readiness to divest itself completely of all such property when and if an opportunity arises to sell the same to a purchaser, under conditions approved by this Court.

50. Defendant Hartford-Empire Company, its officers and directors, be and they are hereby directed to secure the amendment of its Certificate of Incorporation (1) by striking out subdivision (e) of Section 9 thereof, which requires approval of sixty-five per cent (65%) of the common capital stock or unanimous approval by the Board of Directors to permit the corporation to engage in the manufacture and sale of glassware and (2) by striking out the second sentence of the fifth paragraph of Section 3 thereof, making all power to manufacture and sell glass subject to the provisions of Section 9, subdivision (e); and defendant Hartford-Empire Company, its officers, directors, agents, and employees, be and they hereby are enjoined from conforming to the requirements of said subdivision (e) of Section 9 of its Certificate of Incorporation.

51. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them be and they hereby are enjoined from directly or indirectly acquiring, otherwise than through direct issuance from the United States Patent Office (except as hereinafter provided) any patent, patent application, or exclusive rights under any patent or patent application, covering any invention embodied or employed in a machine or process used or to be used in the manufacture of glassware (whether or not the machine or process embodying or employing the invention covered by the patent can be used without infringing another patent or patents) which con-

stitutes or employs in whole or in part, a method, means, or process to obtain results in the glass-making art which are identical with, similar or alternative to those obtained or obtainable by the machinery, methods, or processes embodying inventions covered by patents then owned or controlled by said defendant; provided, however, that nothing herein shall prevent any of said defendants from acquiring

(1) non-exclusive rights under any such patent provided the owner of such patent is not precluded by agreement or understanding with such defendant from granting a non-exclusive license to any other person, firm or corporation; or

(2) any such patent covering inventions of any of its or his employees or those of any of its subsidiaries, made during the time of their employment.

52. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them be and they hereby are enjoined from filing or prosecuting, or causing to be filed or prosecuted, applications for patents in the United States Patent Office: (a) for the purpose, in whole or in part, of using patents issued on said applications, to block off, fence in, prevent or hinder the use or development or improvement by others of machines, methods, means or processes, which obtain or are capable of obtaining results in the glassware making art identical with, similar or alternative to, those

obtained or obtainable by the machines, methods, means or processes, embodying inventions covered by patents owned or controlled by the defendant prosecuting said patent application; and (b) with the intention of not making commercial use of the inventions covered thereby within four (4) years from the date of issuance of patents thereon; provided that failure to make such commercial use of any such inventions shall be deemed *prima facie* proof of the absence of such intention at the time of the filing or prosecution of such applications.

53. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them be and they hereby are enjoined from combining, conspiring or agreeing with any other person, firm or corporation, with respect to patents or patent applications covering inventions embodied in glassware or embodied in methods or in machinery used in the manufacture of glassware,

(a) to obtain from the Patent Office dominating patents for one or more of the persons, firms or corporations so combining, conspiring or agreeing and for the purpose of giving such defendant or the combination, patent control of glass making machinery or of glassware;

(b) to refrain from disclosing to the Patent Office facts within their knowledge which, if disclosed,

would tend to prevent the issuance of dominating patents to one of said persons, firms or corporations, so combining, conspiring or agreeing;

(c) to make any representation to the Patent Office designed to further the issuance of patents to any of the persons, firms or corporations so combining, conspiring or agreeing without fully disclosing to the Patent Office any community of interest existing among said persons, firms or corporations;

(d) to transfer conflicting claims from one patent application to another in accordance with a decision arrived at after negotiation rather than in accordance with a decision by the Patent Office or by the Courts in an interference proceeding or in accordance with a decision arrived at in genuine arbitration proceedings after the declaration of an interference, and without fully disclosing to the Patent Office the facts justifying or warranting such transfer of claims based upon an award in an arbitration proceeding;

(e) to disclose regularly or periodically their patent applications, or information about the unpatented inventions they own or control, to any person, firm or corporation prior to the declaration of an interference with such other person or corporation, except in connection with the granting of a license to said other person, firm or corporation under said unpatented inventions or in furtherance of such a license, and that this shall not prevent the exchange of scientific information in the regular course of business;

(f) to secure information concerning pending interferences to which the person, firm or corporation securing the information is not a party; and to secure information concerning the unpatented inventions of others, except when the person, firm or corporation securing the information is entitled to

obtain such information by the Rules of Practice of the United States Patent Office or by the terms of a license under such inventions; and

(g) to delay the issuance of any patent for the purpose of avoiding the adverse effect of such patents on the previously issued patents of any of the persons, firms or corporations so combining, conspiring or agreeing;

provided, however, that this paragraph 53 shall not be construed to prevent an individual defendant from agreeing with another person with respect to a patent or a patent application covering an invention which said individual defendant has invented jointly with one or more other persons, or to prevent agreements or the exchange of information between officers, directors, and employees of the same corporation in regard to inventions, patent applications, or discoveries, or between a patent lawyer or solicitor and his client, so long as the said lawyer or solicitor is not then also being retained by any other defendant; or to prevent the dissemination through publicly distributed scientific, trade, or other learned publications of general distribution, of information related to inventions or patent applications.

54. The defendants, Hartford-Empire Company, and the individual defendants associated therewith; Corning Glass Works, and the individual defendants associated therewith; Empire Machine Company, and the individual defendants associated therewith; Owens-Illinois Glass Company, and the individual defendants associated therewith; Hazel-Atlas Glass Company, and the individual defendants associated therewith; Thatcher Manufacturing Company, and the individual defendants associated therewith; Lynch Corporation, and the individual defendants associated therewith; Ball Brothers Company, and the individual defendants associated therewith; and the defendants J. D. Dilworth, W. V. Fisher, T. C. Fulton, and G. F. Rieman; and each of them be and they hereby are enjoined from combining, conspiring or agreeing with any other person, firm or corporation with respect to patent applications cov-

ering inventions embodied in glassware or embodied in methods or machinery used in the manufacture of glassware, to obstruct, hinder, harass or delay any other applicant in the Patent Office by

(a) simultaneously prosecuting in any interference in the Patent Office a plurality of applications owned or controlled by parties having a common interest therein;

(b) delaying the recordation in the Patent Office of the assignment to any of the persons so combining, conspiring or agreeing of acquired applications in order to retain record title to such applications in diverse hands to permit the prosecution of a plurality of such applications in a single interference;

(c) filing any "trap" application for the purpose of provoking an interference between the party filing the application and some other applicant in the Patent Office; and

(d) conducting or prolonging friendly interferences not for the purpose of genuinely litigating the issues therein involved but only for the purpose of retaining in the Patent Office the applications in interference as a means of provoking interference with other applications.

55. For the purpose of securing compliance with this judgment, and for no other purpose, duly authorized representatives of the Department of Justice shall, on written request of the Attorney General or an Assistant Attorney General, and on reasonable notice to any one of the defendant corporations made to the principal office of such defendant corporation, be permitted, subject to any legally recognized privilege, (1) access, during the office hours of such defendant corporation, to all books, ledgers, accounts, correspondence, memoranda and other records and documents in the possession or under the control of any of the defendant corporations relating to any matters contained in this judgment, (2) subject to the reasonable convenience of such defendant corporation and without restraint or

interference from the defendants to interview officers or employees of such defendant corporation, who may have counsel present, regarding any such matters, and (3) such defendant corporation, on such request, shall submit such reports in respect of any such matters as may from time to time be reasonably necessary for the proper enforcement of this judgment; provided, however, that such information obtained by the means permitted in this paragraph shall not be divulged by any representative of the Department of Justice to any person other than a duly authorized representative of the Department of Justice except in the course of legal proceedings for the purpose of securing compliance with this decree in which the United States is a party or as is otherwise required by law.

56. Any notice to be given to the Court pursuant to this judgment shall be addressed to the United States District Court, United States Customs and Court Building, Toledo, Ohio; any notice to be given to the Attorney General pursuant to this judgment shall be addressed to The Attorney General, Department of Justice, Washington, D. C.; and any notice to be given to any of the defendants, pursuant to this judgment, shall be addressed to the principal place of business of the respective defendant corporation, or in the case of notice to any individual defendant, to the principal place of business of the defendant corporation with which such individual defendant is connected.

57. (A) Jurisdiction of this cause is retained for the purposes heretofore set forth, as well as for the purpose of enabling any of the parties to this judgment or their successors to apply to the Court at any time for such further orders and directions as may be necessary or appropriate for the construction or carrying out of this judgment, for the modification thereof, for the enforcement of compliance therewith and for the punishment of violations thereof; and the Attorney General may at any time, and from time to time, apply to the Court for a modification of this judgment if it should appear that the operation of the terms of this judgment is failing to bring about a situation in harmony with the federal antitrust laws.

(B) Except where applications to this Court are elsewhere herein provided to be upon notice to the Attorney General or other specified parties, any application by any party hereto, under the provisions of this paragraph alone or in combination with any other paragraph, shall be made upon notice to all of the parties hereto.

58. Paragraphs 10 to 18, inclusive, and paragraph 20 of this judgment shall go into effect immediately. Paragraph 44 and sub-paragraph A of paragraph 45 and paragraph 46 of this judgment shall go into effect ten (10) days from the date hereof. All other paragraphs of this judgment, other than those heretofore specifically enumerated in this paragraph 58, shall go into effect sixty (60) days from the date hereof.

59. The plaintiff shall recover jointly and severally from the defendants mentioned in paragraph 3 of this judgment all costs of this suit.

60. The Complaint be and hereby is dismissed against each of the following defendants: The Stevenson Corporation, Anchor-Hocking Glass Corporation, Liberty Glass Company, Herman Krannert, V. E. Macy, Jr., J. K. Moffett, Ernest Stauffen, Jr., L. B. Williams, J. O. Deegan, B. E. Factor, C. D. King, H. J. Carr, H. C. Laughlin, H. J. Hamlin, F. B. Schlub, Russell Davidson, C. J. Pfeffer, Frank P. Collins, William H. Honiss, Alanson B. Houghton, Ben F. Hazelton, Jr., H. C. Phillips, J. Sumner Jones, C. G. Decker, C. K. Hevener, George F. Collins, R. H. Levis, Arthur E. Ball, A. M. Bracken, Glen W. Cole, W. C. Decker, George B. Hollister, John C. Hostetter, P. W. Jenkins, S. O. Laughlin, George D. Macbeth, A. L. Metzner, F. H. Mills, F. T. Nesbitt, H. W. Sherwood, F. J. Solon, John L. Thomas, and C. J. Wilcox.

(signed) FRANK L. KLOEB
United States District Judge.

Dated: October 8, 1942.

IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF OHIO,
WESTERN DIVISION

No. 4426 Civil

UNITED STATES OF AMERICA,

Plaintiff,

vs.

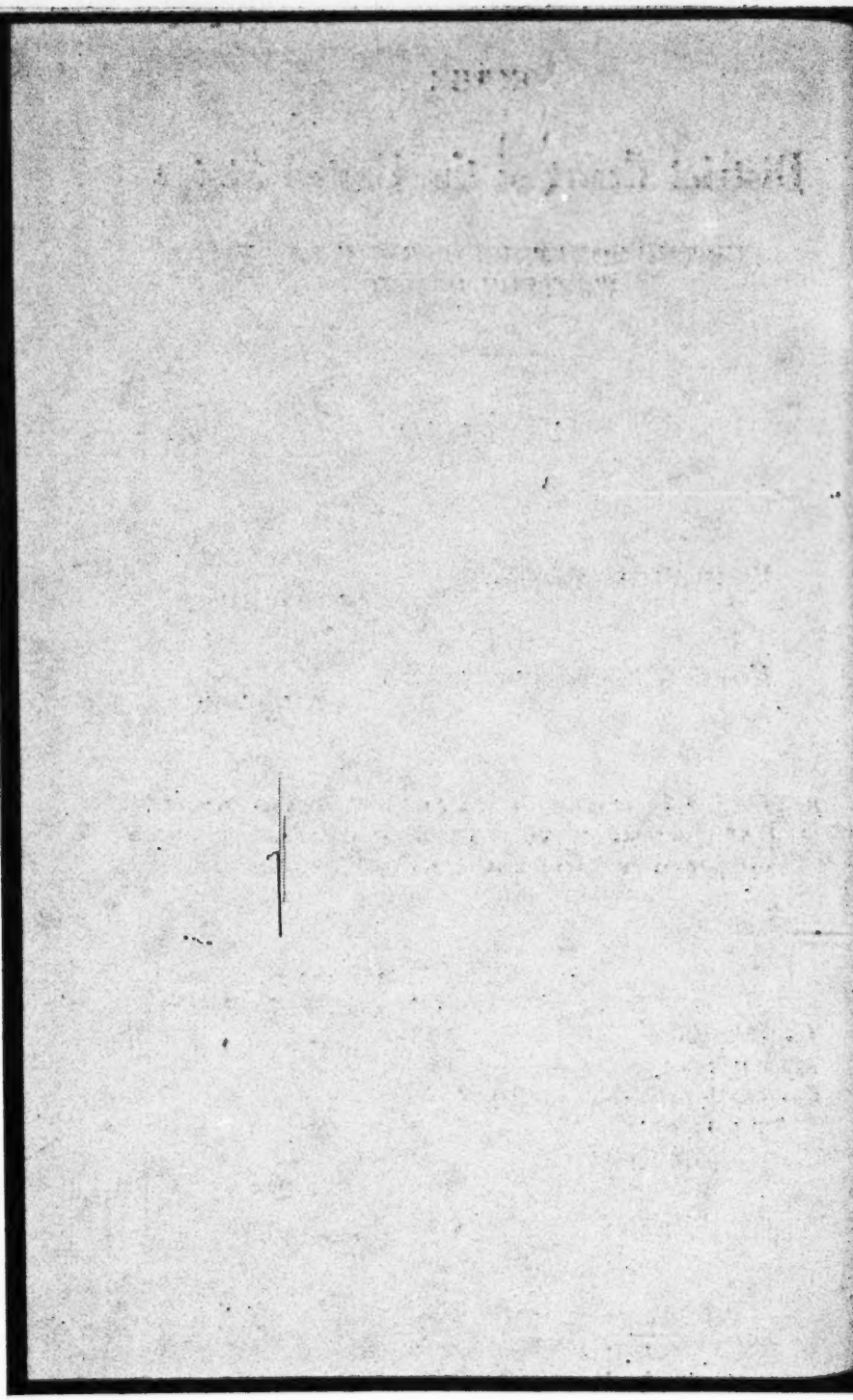
HARTFORD-EMPIRE COMPANY ET AL.,

Defendants.

REPORT OF JAMES A. SHANLEY, RECEIVER OF HARTFORD-EMPIRE COMPANY, ON THE OPERATION AND RESULTS OF THE RECEIVERSHIP

ROSS W. SHUMAKER,
Attorney for the Receiver.

JOHN W. WINN,
ALAN B. LOOP,
FRASER, SHUMAKER, KENDRICK & WINN,
Toledo, Ohio,
Of Counsel.



IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF OHIO,
WESTERN DIVISION

No. 4426 Civil

UNITED STATES OF AMERICA,

Plaintiff,

vs.

HARTFORD-EMPIRE COMPANY ET AL.,

Defendants.

REPORT OF JAMES A. SHANLEY, RECEIVER OF HARTFORD-EMPIRE COMPANY, ON THE OPERATION AND RESULTS OF THE RECEIVERSHIP

ROSS W. SHUMAKER,
Attorney for the Receiver.

JOHN W. WINN,
ALAN B. LOOP,
FRASER, SHUMAKER, KENDRICK & WINN,
Toledo, Ohio,
Of Counsel.

INDEX

Page

Scope and Purpose of the Report..... 1

The Reasons and Necessity for the Receivership as Stated by the Court..... 2

A. Restraints upon Hartford-Empire Company..... 2

B. Protection to Hartford-Empire Company..... 7

1. Collection and Earmarking of Royalties..... 8

2. The Furnishing of Engineering and Other Services to the Licensees..... 16

3. Maintaining the Cash Position and Working Capital of Hartford-Empire Company..... 21

4. Preserving the Hartford-Empire Organization, Including the Executive and Employee Personnel 28

5. The Effect of the Receivership Upon Litigation Involving Hartford-Empire Company..... 32

6. Miscellaneous 36

Summary and Conclusion..... 37

Appendix 39

Collections of Royalties by Receiver from September 1, 1942, to June 30, 1944..... 39

Statement of Earmarked Funds and Depositaries as of June 30, 1944, and August 3, 1944..... 42

Statement of Cash Receipts and Disbursements—Earmarked Funds—September 1, 1942, to June 30, 1944 43

Comparative Balance Sheets as of June 30, 1944, and August 31, 1942..... 44

Statement of Profit and Loss from September 1, 1942, to June 30, 1944..... 46

Cash Disbursements from General Funds from September 1, 1942, to June 30, 1944..... 48

Additions to General Funds from September 1, 1942, to June 30, 1944..... 50

Statement of Impounded Funds as of June 30, 1944.. 51

Order of District Court Replenishing General Funds, Filed May 25, 1944..... 52

IN THE

District Court of the United States

FOR THE NORTHERN DISTRICT OF OHIO,
WESTERN DIVISION

No. 4426 Civil

UNITED STATES OF AMERICA,

Plaintiff,

vs.

HARTFORD-EMPIRE COMPANY ET AL.,

Defendants.

REPORT OF JAMES A. SHANLEY, RECEIVER OF HARTFORD-EMPIRE COMPANY, ON THE OPERATION AND RESULTS OF THE RECEIVERSHIP

SCOPE AND PURPOSE OF THE REPORT

James A. Shanley, Receiver of Hartford-Empire Company, files this report as a factual statement covering the operation and results of the receivership from September 1, 1942, when, as Receiver, he assumed actual control and management of the Company's property and business,[1] to

[1] The Receiver was appointed by the court on August 25, 1942, simultaneously with the filing of the opinion of the court. The Receiver is a resident of New Haven, Connecticut. He qualified as Receiver by filing his bond with the Clerk of Courts in Toledo, Ohio, on August 28, 1942. Thereafter, with the approval of the court, he selected legal counsel and a firm of certified public accountants to assist him in his duties. It was September 1, 1942, before he was able actually to take over the assets and property of Hartford-Empire Company and commence operations.

June 30, 1944, the last date for which accurate accounting data are available.

From time to time, pursuant to paragraph 18 of the judgment, the Receiver has filed with the court petitions for advice and instructions and reports[1] dealing with specific problems and phases of the receivership, but he has not heretofore filed a comprehensive report covering generally his operations as Receiver and the results.

This report is intended to give the court such a general picture of the activities and accomplishments of the receivership and its effects upon Hartford-Empire Company and its business.

THE REASONS AND NECESSITY FOR THE RECEIVERSHIP AS STATED BY THE COURT

A. Restraints Upon Hartford-Empire Company

The reasons and necessity for the receivership are set forth by the court in its opinion (R. Op. Vol. 157; 46 F. Supp. 620-621), and may be summarized as follows:

1. To prevent Hartford from transferring, dissipating or changing the status of its patents, property and other assets pending an appeal or the working out of the relief ordered by the court.

2. To prevent any further abuses by Hartford of its patent privileges and any further violations by the company of the anti-trust laws.

3. To conserve the business and assets of Hartford, and to preserve the *status quo* pending an appeal and a final determination of the issues in the case.

---

[1] The Receiver has filed with the court some fifty reports and petitions for advice dealing with problems arising in the conduct of the receivership and the results of his operations. All these have been the subject of hearings before the court. The Receiver has also filed numerous briefs and made many verbal reports to the court.

The duties of the Receiver are set out in the order of his appointment, filed on August 25, 1942 (R. Op. Vol. 161). The order of appointment was incorporated without substantial change in the judgment of the court entered on October 8, 1942 (R. 7661-65).

It is apparent from the court's opinion, the order appointing the Receiver, and the judgment, that the object of the court in appointing a receiver for Hartford-Empire Company was two-fold: (1) to impose effective restraints upon Hartford, and (2) to protect Hartford against disintegration and ruin pending final decision of the issues by the Supreme Court. The first of these objects, and the effect of the receivership in achieving it, will be first briefly considered.

In taking over the assets and management of Hartford-Empire Company, the Receiver assumed control of its bank accounts, cash, contracts, etc., and proceeded to exercise that control by countersigning all checks for the payment of money, and by approving all contracts and commitments entered into by Hartford-Empire Company.[3]

---

[3] Since September 1, 1942, all checks drawn upon the funds of Hartford-Empire Company in amounts in excess of $200.00 must be countersigned by the Receiver; and all contracts, including license and lease agreements, entered into by Hartford-Empire Company must be approved by the Receiver. In approving contracts the Receiver invariably uses a stamped endorsement reading as follows: "This agreement is approved subject to any order or judgment of the United States District Court, for the Northern District of Ohio, Western Division, in the case entitled 'United States of America against Hartford-Empire Company, et al.' Number 4426 Civil and to any final judgment which may be rendered after any appeal in that case.

By_____
James A. Shanley, Receiver of
Hartford-Empire Company"

In order to be advised accurately of the property of Hartford-Empire Company and its business operations at the date of his taking over the management and control of the company—to know, in short, what he was taking over and attempting to manage—the Receiver directed his accountants to prepare an audit of the assets and liabilities of the company as of the close of business on August 31, 1942. This was done and the report was furnished to the Receiver. From the beginning the Receiver has also had one or more of his accountants at the plant of Hartford-Empire Company so that he could be kept currently informed concerning operations of the company. These accountants have audited bills and vouchers, and have prepared and furnished the Receiver with monthly statements of cash receipts and disbursements, monthly balance sheets, statements of profit and loss, and budgets.

In addition, the accountants, under the direction of the Receiver, have analyzed and prepared exhaustive reports on all machines and machinery owned and licensed by Hartford-Empire Company, and have prepared the annual reports of the company. The accountants have also prepared numerous special reports relating to accounting matters in which the Receiver was interested. They are now and have been performing all the accounting work done by independent auditors employed by the company prior to the receivership.

By means of these accounting controls and reports, the Receiver has been kept constantly informed in detail as to the financial position and operations of the company.

For several years prior to the appointment of the Receiver, Hartford-Empire Company had been paying divi-

dends to its shareholders. The sole capitalization of the company consists of 470,115 outstanding common shares. Hartford continued to pay dividends to its shareholders after the Government filed the present suit on December 11, 1939.[4] To conserve the cash of Hartford, the Receiver stopped the payment of further dividends.

One of the transactions cited by the court in its opinion to show the necessity of having a court officer in charge of the affairs of Hartford-Empire Company, was the agreement between Hartford-Empire Company and Corning Glass Works, dated September 23, 1940, and modified on December 1, 1940. Under this agreement Hartford, Corning and Empire Machine cancelled the Glass Contract and the agreement of June 30, 1916. In consideration therefor, Hartford transferred to Corning, without the knowledge or approval of the court, three patents and agreed to pay Corning the sum of $1,125,000.00 in ten equal annual installments, commencing September 30, 1941 (Finding of Fact No. 509; R. Vol. X, page 7378). The first annual payment in the sum of $112,500 was, in fact, made by Hartford to Corning on September 30, 1941. The Receiver assumed control thirty days before the second annual payment was

---

[4] Since January 1, 1940, Hartford-Empire had paid dividends to its shareholders as follows:

1940	$1,528,150.00	
1941	940,400.00	
1942		
April 1	235,057.50	
July 1	235,057.50	
Total		$2,938,665.00

due, and, of course, did not approve or permit the payment of this installment.[5]

Another example cited by the court (Finding of Fact No. 513) of important changes made by Hartford-Empire Company in its contracts and status without the knowledge or approval of the court, was the amendment on August 1, 1940, of the agreement between Hartford and Ball Brothers, entered into on March 25, 1933.

By the terms of the new agreement entered into after the complaint and answers had been filed in the case, Hartford, among other things, (1) repurchased from Ball Brothers the residual exclusive fruit jar license, (2) granted to Ball Brothers a non-exclusive license to make all items of glassware except bulbs, tubing and cane, and vacuum bottles, (3) cancelled the clause by which Ball Brothers gave Hartford an option to acquire its feeder patent inventions, and (4) paid to Ball Brothers the sum of $425,000.[6]

---

[5] In the final judgment entered by the court herein on October 8, 1942 (Par. 45(A)), Hartford-Empire Company and the Receiver were enjoined from making further payments to Corning Glass Works under these agreements, and Corning Glass Works was directed forthwith to pay to the clerk of the court, to be held in the registry of the court, the sum of $112,500, which had been paid by Hartford to Corning on September 30, 1941. Such deposit was thereafter made by Corning, and the sum of $112,500 is now held in the registry of the court.

[6] The final judgment (Par. 44) directed Ball Brothers Company to pay to the clerk of the court all the monies received by Ball Brothers from Hartford-Empire Company pursuant to the agreement of August 1, 1940, to be impounded and held by the court subject to the further order of the court, pending the termination of the receivership of Hartford-Empire Company. In accordance with the judgment Ball Brothers has deposited with the clerk the sum of $425,000 which is now held in the registry of the court.

No such change in the status of Hartford-Empire Company or of its property and contracts has been possible since the Receiver has been in charge.

The very fact of the receivership has, itself, operated as an effective restraint upon Hartford-Empire Company; and with the control exercised by the Receiver over the disbursement of funds and the completion of contracts, it has not been possible for Hartford-Empire Company, had it desired to do so, to change its status, to transfer its patents or other property, to abuse its patent privileges, or perform any acts illegal under the anti-trust laws. The first purpose and objective of the court in establishing the receivership, namely, the imposition of effective restraints upon Hartford-Empire Company, has, therefore, been accomplished by appointing a Receiver over Hartford and its business.

B. Protection to Hartford-Empire Company

The second necessity for and purpose of the receivership, as enumerated by the court in its opinion, was to conserve the business and assets of Hartford, and to preserve the *status quo* pending an appeal and the final determination of the issues in the case—in other words, to protect Hartford-Empire Company in the interim against destruction of its business and organization. To accomplish this objective has proved to be the main work of the receivership and has made the greatest demands upon the Receiver. In conserving Hartford-Empire Company and its assets and in maintaining the *status quo*, the Receiver has had to deal with the following tasks and problems:

1. The collection from licensees of royalties due under license and lease agreements, cancelled by the court, but treated as still in effect, pending decision by the Supreme Court.

2. The continuation of Hartford's service to its licensees, including the furnishing of machines, parts, engineering service, and the results of its research and development work.

3. The preservation of Hartford's organization, including its executive and employee personnel, from disintegration due to the shock of adverse court decisions and the uncertain future of the company.

4. The conserving of the property and business of Hartford, including provision for cash and working capital needs, while at the same time segregating and earmarking its principal source of income, namely, royalties collected from licensees.

5. The supervision and handling of litigation and the expenses thereof; and the protection of Hartford against treble damage suits and other ruinous litigation, pending final decision by the Supreme Court.

These are some of the principal tasks with which the Receiver has had to deal in the first twenty-two months of the receivership. The results of his efforts in endeavoring to solve each of these problems will now be briefly reviewed. The figures and statistics used are based upon the reports of his accountants.

1. Collection and Earmarking of Royalties

On September 1, 1942, when the Receiver began operations, he found that Hartford-Empire Company had about 70 licensees which were paying royalties of about $6,000,000.00 annually to Hartford under license and lease agreements. These licensee corporations, some large and some small, were widely distributed about the United States and engaged in the production of various types of glassware.

Some of the largest licensees were parties defendant

in this case, and all the licensees were vitally interested in the decision of the District Court.

When the decision of the court was announced, holding that Hartford-Empire Company had used its license and lease system in violation of the anti-trust laws and that all license and lease agreements should, therefore, be cancelled and the entire system abolished, the licensees were in doubt as to whether they should continue to pay royalties. Many of them desired and expected to receive immediately the benefits of the court's decision.

On September 3, 1942, as soon as practicable after taking over the property and assets of the company, the Receiver addressed a letter to all licensees of Hartford-Empire Company, notifying them of the opinion of the court and of his appointment as Receiver. He further advised the licensees of the order of the court requiring him as Receiver to carry out existing agreements with licensees, to collect all royalties and fees, and to earmark the royalties pending final action of the Supreme Court of the United States.

The licensees were directed to continue payments of royalties and fees just as they had done before the decision of the District Court except that all checks should be made payable to the Receiver. Even after this letter, it required many conferences and voluminous correspondence to convince some of the licensees that the cancellation by the court of the license and lease agreements did not become immediately effective and that this part of the judgment of the court had been suspended and stayed pending final disposition of the case by the Supreme Court.

Several of the licensees, including two of the largest payers, at first refused to pay royalties to the Receiver.

Apparently, they were advised by their counsel not to do so.[1] One group of licensees persisted for many weeks in its refusal to pay royalties. Counsel for this group conferred many times with the Receiver in an effort to persuade him that the group of licensees which he represented should be excused from payment.

The Receiver was certain that if one or more of the licensees refused to pay royalties the news of their refusal so to do would spread to the others, and that the result would be a refusal by all licensees to pay royalties. In order to prevent such an epidemic, the Receiver insisted that all licensees without exception pay royalties promptly under their license and lease agreements.

In the case of the large group of licensees hereinabove mentioned, it was only after the Receiver had declined to furnish equipment needed by one member of the group and after an informal conference had been had with counsel for this group in the presence of the court, that this group of licensees capitulated and began the payment of royalties.

All companies constituting this group have since paid royalties to the Receiver, the total payments averaging about $50,000.00 monthly.

As a result of the Receiver's efforts in the early weeks of the receivership all licensees, with the exception of two

---

[1] Some of the licensees were concerned as to the taxability of the segregated funds and assigned this excuse for not paying royalties. To remove this objection the Receiver directed his counsel to file an application with the Commissioner of Internal Revenue for an administrative ruling concerning taxability of these funds. On February 25, 1943, the Commissioner handed down a ruling to the effect that the royalty funds collected and earmarked by the Receiver were not taxable prior to the time that they became available to the company. The Commissioner also held that the royalties paid by the licensees and impounded by the Receiver were deductible for income tax purposes by the licensees in the year in which the expense was incurred or paid.

or three who were actually engaged in litigation with Hartford-Empire Company at the time the Receiver was appointed, have continued to pay royalties to the Receiver. In fact, since the first few weeks of the receivership the collections of royalties have been excellent and are at the date of this report substantially current.

As of June 30, 1944, after twenty-two months of receivership, the Receiver has collected from licensees in royalties the sum of $12,198,875.43, of which $11,594,933.42 accrued since September 1, 1942, has been earmarked by the Receiver, and held by him subject to the provisions of paragraph 15 of the judgment of the court.

The reason all royalties collected by the Receiver from licensees have not been earmarked is due to the fact that the court ordered that only the royalties which were earned or accrued after September 1, 1942, should be earmarked by the Receiver. The Receiver had discovered when he took over the management of Hartford-Empire Company on September 1, 1942, that not all of the licensees were current in their payments. Some of the licensees were delinquent in their payments. If all royalties, regardless of when they were earned or accrued were upon collection to be earmarked, obviously the licensees delinquent in their payments would receive an advantage over those whose payments were current. It seemed to the Receiver that a date should be fixed from and after which all royalties accruing should be earmarked.

To meet this problem the Receiver filed a petition for advice and instructions with the court, serving a copy of the petition and notice of the hearing date upon all licensees to be affected. After a full hearing and submission of the matter upon briefs, the court entered an order directing that all royalties earned and accruing on and after September 1, 1942, should be earmarked and segregated by the Receiver, but that all royalties earned or accrued prior to

that date should be transferred into the general funds of the Receiver for use by him in the operation of the company.

In pursuance of this order the Receiver, therefore, has earmarked only those collections of royalties which were earned or accrued after the date that he began operations, namely, September 1, 1942. Royalties collected by the Receiver which accrued prior to that date, amounting to a little more than $600,000.00, have been transferred to the general funds of the Receiver and thereby all licensees were placed upon an equal basis.

In the Appendix of this report, at pages 39-41, will be found an exhibit showing the total amount of the royalties collected by the Receiver from licensees from September 1, 1942, to June 30, 1944, with the names of the licensees, the amount paid by each, and the amount allocated to the general funds as distinguished from the amount segregated and earmarked by the Receiver.

The segregated funds, with the approval of the court, have been deposited by the Receiver in separate accounts in several banks which have been carefully selected by the Receiver. The total amount of these funds, the disbursements therefrom, and the names of the depositaries as of June 30, 1944, are shown in an exhibit in the Appendix of this report, at pages 42-43. Royalties are being currently collected by the Receiver at the rate of about $600,000.00 per month, and if this rate continues until the end of the calendar year, the royalties collected and earmarked by the Receiver will total at that time approximately $15,000,000.00.

The collection of these royalties by the Receiver has not been an easy task. It has not been automatic, a mere bookkeeping transaction. Although the critical period was the first few weeks of the receivership, it has been neces-

sary from time to time, even down to the present date, to exert the full authority of a court officer in order to collect the royalties.

A few of the licensees have been quick to seize upon one pretext or another for discontinuing payment of royalties. Particularly the Receiver has had a difficult time with renewals of expiring license and lease agreements. In order to maintain the *status quo* and to continue the business of Hartford-Empire Company, the Receiver has had to insist that expiring license and lease agreements be renewed according to their terms or that the machines covered by such agreements be returned to the Receiver. Not to have so insisted would have meant serious interruption and probable breakdown of the business long before the decision of the Supreme Court was announced.

Two of the largest licensees and several of the smaller concerns vigorously resisted the efforts of the Receiver in the matter of renewals of expiring agreements. Several of these agreements have been renewed only after prolonged negotiations with the Receiver. In twenty-two months more than 75 expiring license and lease agreements have been renewed, thereby insuring continuation of business and royalty payments to the Receiver.

Only recently one of the largest royalty payers has, without the approval of the court or the receiver, discontinued the payment of royalties under its agreement with Hartford-Empire on the pretext that the opinions of the Supreme Court in the case of *Hazel-Atlas Glass Company vs. Hartford-Empire Company*, No. 398, and in the case of *Shawkee Manufacturing Company et al. vs. Hartford-Empire Company*, No. 423, relieved it from the obligation to make further payments of royalties on a part of its production.

This licensee, Ball Brothers Company, the largest producer of fruit jars in the world, discontinued as of May

15, 1944 (the date the opinions of the Supreme Court just mentioned were announced), the payment of royalties to the Receiver on Ball-feeder production. Its counsel brought the matter to the attention of the Receiver and his attorneys, who, after investigating the subject, have reached the conclusion that Ball Brothers Company was not justified in its action.

The Receiver, thereupon, filed a petition with this court, now pending, requesting an order directing Ball Brothers Company to resume and continue the payment of royalties to the Receiver on its Ball-feeders until the decision of the Supreme Court has been announced or until the agreement under which such royalties are payable has expired.

This matter involves, from May 15, 1944, to December 31, 1944, the amount of approximately $225,000.00. It also involves the stability of the earmarking program set up by the court, because if Ball Brothers Company is permitted to discontinue the payment of royalties, other licensees will promptly be advised of its action and will likewise quit paying. In fact, several other licensees have already written to the Receiver seeking to be relieved from further payment of royalties.

In any case, where the Receiver is unable through his own efforts to persuade licensees to continue the payment of royalties under existing agreements or to renew expiring agreements, the Receiver will promptly bring the matter to the attention of the court for appropriate instructions or orders. Only in this way can the collection and earmarking of royalties be maintained until the Supreme Court has spoken.

It is the hope and belief of the Receiver that when the

Supreme Court announces its decision in the pending appeals, the collection of royalties from all Hartford licensees (except, of course, those in actual litigation with Hartford-Empire Company prior to receivership) will be substantially current, in accordance with the intention of the court to give Hartford every protection pending final determination of the issues in the case.

To conclude, the Receiver ventures to report to the court, based upon his experience over the past twenty-two months, that without a court officer to enforce payment of royalties during the long and uncertain interim between the announcement of the opinion of the District Court and the final decision by the Supreme Court, the licensees of Hartford-Empire Company would not have paid royalties to Hartford, and it would not have been possible for Hartford without the aid of the Receiver to have carried out existing license and lease agreements, to have enforced renewal of expiring agreements, and to have collected the royalties.

It is not too early to report that this part of the Receiver's work has been successfully accomplished, and the intention and desire of the court as expressed in its opinion and judgment have been carried out.

If the judgment is affirmed by the Supreme Court the licensees will receive back the royalties they have paid as provided for in paragraph 15 of the judgment, thus giving them the immediate fruits of the judgment; but if the judgment, or that part of it here considered, is reversed by the Supreme Court, Hartford-Empire Company in the meantime has been protected because its business has been maintained and carried on and the royalties have been collected and preserved.

2. The Furnishing of Engineering and Other Services to the Licensees

The period covered by this report was one in which heavy demands were made upon the glass industry. Production by the manufacturing companies, including those using machines under license and lease from Hartford-Empire Company, has been at a high level and Hartford and the Receiver have received many calls for machines, parts and service.

In its opinion (46 F. Supp. 541) at page 620 the court said:

> "Pending an appeal and final determination of the issues in this case, the Receivers are directed to take over the management of Hartford and continue to operate under the present contracts and agreements of Hartford in its licensing and leasing system."

The Receiver was also directed by the court to manage and supervise the operations of Hartford-Empire Company with as little interference as possible with its organization and usual methods of operation. This the Receiver has done.

In addition to carrying out the existing license and lease agreements, the Receiver, with the approval of the court, has entered into numerous new license and lease agreements and has approved many renewals of expiring license and lease agreements. All of these agreements, new and renewal, as well as all other contracts affecting the business of Hartford-Empire Company entered into by the Receiver, have been approved by him conditionally subject to the judgment and orders of this court and any future orders or judgments that may be entered as a result of the appeal to the Supreme Court. The form of the approval used by the Receiver is set out in the footnote at page 3 of this report.

From time to time the Receiver has filed with the court

reports covering new license and lease agreements approved by him, renewals of expiring agreements, and cancellations. Five of such reports have been filed and approved by the court, covering the period from September 1, 1942, to April 14, 1944. In this period the Receiver has approved about 220 new license and lease agreements covering machines needed by the glass industry.

The machinery shipped to the industry by Hartford during the first twenty-two months of the receivership included 66 feeders, 54 forming machines, 66 conveyors, 59 stackers, 54 lehrs, 22 batch feeders and numerous other types of equipment. Substantial orders are now on hand for additional machinery and equipment of this character.

In addition to the new license and lease agreements, the Receiver in the period mentioned, approved renewals of about 75 license and lease agreements, covering similar types of machines. Several general license agreements with large concerns in the industry have been renewed.

Prior to the receivership Hartford-Empire Company did a large metal and clay parts business. This business has continued under the Receiver and has substantially increased. In the twenty-two months covered by this report, the total gross collections from parts, etc., have amounted to $1,757,380.93, from which a substantial gross profit has been realized.

In the same period the Receiver has collected in license fees for machines furnished to the industry approximately $1,291,424.24. The net profit, however, from the license fees for machines has been very little, inasmuch as the cost of the machines averages approximately the same as the license fees.

The Receiver has continued to render to licensees the same type of engineering and other like service as was rendered by Hartford-Empire Company prior to the receivership. In a statement prepared by Mr. Roger M.

Eldred, Vice President of Hartford-Empire Company, found in Volume X of the Transcript of Record at page 7609, Mr. Eldred said:

> "The Receiver is rendering the same type and kind of engineering service to licensees as was rendered prior to September 1, 1942.
>
> "In the Licensee Service Department, which comprises employees devoting full time to engineering service, there were 90 employees on September 1st and there were 88 employees on November 19th. Two employees have left this department to join U. S. forces within the past two or three weeks and have not as yet been replaced.
>
> "The amount of engineering service devoted to licensees is, however, considerably greater than would be indicated by the number of employees shown above.
>
> "The roots of Licensee Service are embedded throughout the entire organization of the Hartford-Empire Company, and even though certain departments do not devote full time to licensee service, nevertheless a large amount of time is provided from these other departments, particularly technical departments, in order to round out and back up the service given directly by the department called 'Licensee Service.'
>
> "This additional service is drawn primarly from the Research, Development, Experimental Plant, Drafting and Production Departments and involves an additional 41 employees, the number of which has not altered between September 1st and November 19th.
>
> "I want to make it clear that these additional 41 employees do not devote full time to Licensee Engineering Service. The amount of time so devoted would range from 10% for some of these people to as high as 50% for a few of them."

Mr. Eldred's statement was made on November 23, 1942, after the Receiver had been in office less than three months, but it is just as true now as it was then. The en-

gineering service rendered by the Receiver has continued to be the same as it was prior to the receivership. This service is of great value, particularly to many of the smaller licensees which do not have facilities for research nor the trained employees necessary to service machines and plant operations.

Under the Receiver, the company has continued with its experimental work in order to improve the types and qualities of glassware. Considerable work has been done by Hartford-Empire Company employees to devise glass substitutes for critical metals rendered scarce by the demands of war. The Receiver has placed no impediment in the conducting of experimental and research work by Hartford employees. This work has gone ahead just as it did before a receiver was appointed.

The Receiver has approved several contracts for engineering services in connection with the installation and operation of furnaces, including several contracts with foreign concerns. In several instances employees have been loaned to other companies to assist them in working out some difficult problem arising in the course of their operations. New machinery and equipment have been developed, or are in the process of development. In every way the Receiver has encouraged the officers of Hartford-Empire Company in their efforts to develop new and improved equipment and products, to obtain new business and to carry on its usual business in a normal way.

As another illustration of this policy on the part of the Receiver, the case of Plax Corporation may be mentioned. That company is a wholly-owned subsidiary of Hartford-Empire Company engaged in the manufacture and sale of plastic articles made by means of machines and processes which it has developed. Plax Corporation, for the past two years, has been engaged in production under

important war contracts. Its products have found their way into such important war activities as radar, radio, storage batteries, instrument panels, weather instruments, etc. Due to research and development costs, labor turnover, ceiling prices and other problems arising in an adolescent company, Plax Corportion has had to have assistance from its parent company. Prior to the receivership, Hartford had invested substantial sums of money in Plax Corporation. Since the Receiver was appointed, he has continued the policy of developing and preserving this potentially valuable asset of Hartford-Empire Company. He has filed with the court four reports concerning Plax Corporation and its operations, and with the approval of the court has provided loans out of Hartford's general funds to Plax Corporation in the total amount of $195,000.00 to provide adequate working capital and to insure the carrying on of its important war work.

At all times, and in every way, the Receiver has attempted to be constructive and helpful in assisting Hartford in the preservation of its assets and business in this difficult period which followed the announcement of the decision of this court in the anti-trust case.

The Receiver is of the opinion that without the aid of a court officer, it would have been difficult for Hartford to maintain its organization and to continue to render engineering service to its licensees; particularly would it have been difficult, if not impossible, for Hartford to have compelled the renewal of license and lease agreements, and maintain its position in the industry, but for the fact that

it has had the aid of a Receiver under orders to conserve its assets and maintain the *status quo*.

3. Maintaining the Cash Position and Working Capital of Hartford-Empire Company

One of the problems of the Receiver has been to provide and maintain adequate cash and working capital with which to carry on the business and operations of the company. Prior to the receivership, royalties collected from licensees accounted for approximately 80% of the income of Hartford-Empire Company. After the appointment of the Receiver, all royalty income from licensees was segregated and earmarked. It became necessary for the Receiver, in order to carry on the normal operations of the company, to resort to the cash surplus of the company because the income derived from sources other than royalties was not sufficient to meet the expenses of operation.

When the Receiver began operations on September 1, 1942, Hartford-Empire Company had cash on hand and on deposit in the amount of $3,297,420.28. At the close of business on June 30, 1944, after twenty-two months of operations by the Receiver, the cash on hand and on deposit amounted to $1,304,906.65. The difference representing the depletion in the cash was $1,992,513.63, or an average monthly depletion of $90,568.80.

Comparative balance sheets of the company, as at August 31, 1942, and of the Receiver, as at June 30, 1944, are included in the Appendix of this report at pages 44-45.

From these balance sheets, it appears that the current asset position of the company, as of August 31, 1942, and of the Receiver as of June 30, 1944, compares as follows:

Current Assets	August 31, 1942	June 30, 1944
General Funds	$3,297,420.28	$1,304,906.65
Marketable Securities	1,397,396.54	1,340,952.18
Notes and Accounts Receivable (not earmarked)		
Less reserve for doubtful accounts	995,033.54	324,625.30
Accrued Interest Receivable	4,163.83	5,275.95
Inventories	1,019,054.84	1,400,842.32
Total Current Assets	$6,713,069.03	$3,980,602.40

In the Appendix at pages 46-47, we have also included a Statement of Profit and Loss, covering the operations of the Receiver from September 1, 1942, to June 30, 1944. This Statement includes all royalties collected by the Receiver just as if they had not been segregated and earmarked. It also allows a credit to Hazel-Atlas Glass Company under its participation rights in Hartford's income under the July 1, 1932, agreement. The Statement also makes full allowance for Federal taxes on all income, including royalties collected and earmarked by the Receiver.

In other words, this Statement is prepared just as if there were no earmarking order. It shows a net profit for the receivership for the twenty-two months beginning September 1, 1942, and ending June 30, 1944, of $2,417,806.17, or more than $5.00 per share on each of the company's 470,115 shares of outstanding common stock, after full provision for Federal taxes. This result has been accomplished, notwithstanding increased labor costs and war time restrictions.

In the period beginning September 1, 1942, and ending June 30, 1944, the Receiver, in carrying on the business of Hartford-Empire Company, disbursed from its general

funds the total sum of $7,892,220.24. These disbursements are classified and itemized in a general way in an exhibit appearing at pages 48-49 in the Appendix of this report.

In the same period, the Receiver, in the course of his operations, added to the general funds of the company the sum of $5,899,706.61. A general itemization of these additions to the general funds is shown on the exhibit appearing at page 50 in the Appendix of this report.

The decline in the cash position, amounting to $1,992,513.63, resulting necessarily from the earmarking of the royalty income, would have been much greater, except for two factors. First, the non-royalty income, particularly income from the parts and other new business, has increased during the receivership; and, second, the Receiver has taken steps, with the approval of the court, which have resulted in the addition to the general funds of approximately $1,175,000.00.

The first of these steps taken by the Receiver has been hereinabove mentioned at page 11 of this report. On October 5, 1942, the Receiver filed a petition for advice and instructions in order to obtain a court order clarifying the duties of the Receiver with respect to the earmarking of funds. The opinion of the court and the order appointing the Receiver left some doubt as to whether the Receiver should earmark license fees collected from licensees, as well as royalty collections. There was also the question, which has been touched upon hereinabove, as to whether all royalty collections should be earmarked, or only those royalties which accrued after September 1, 1942, when the Receiver began operations.

Before the first petition filed by the Receiver on this subject was acted upon, the Receiver, on October 17, 1942,

filed a second petition. Copies of this petition and notice of hearing were served upon all licensees and other persons interested.[8]

After a full hearing, the court filed a Memorandum Opinion and entered an order holding that royalties only should be earmarked by the Receiver, and that all other income should be available for the general operating funds. The court further held that only those royalties collected by the Receiver should be earmarked, which accrued on and after September 1, 1942. This order resulted in the transfer into the general operating funds of the Receiver of the sum of approximately $604,000.00.

Again on January 6, 1944, the Receiver filed a petition for advice and instructions with the court, in which the Receiver set out the facts concerning the decline in the surplus cash of the company due to the earmarking of royalties. The Receiver recommended to the court that it approve an order making some part of the funds impounded in the registry of the court available for operations.

On September 1, 1942, Hartford-Empire Company had already deposited with the clerk, under the impounding order, the sum of $2,137,338.03, and Hazel-Atlas Glass Company had deposited in the fund the sum of $1,167,937.20.

---

[8] It should be mentioned here that the Government vigorously opposed this petition of the Receiver, insisting that the Receiver should segregate and earmark all royalty income, regardless of whether it accrued before or after September 1, 1942. The Government also asserted that to transfer to the general operating funds of Hartford any part of the royalty collections, would be giving Hartford the fruits of its illegal licensing system.

The latter amount represented royalties due from Hazel-Atlas Glass Company accruing prior to September 1, 1942.[9]

Inasmuch as the licensees of Hartford, except Hazel-Atlas Glass Company, had received the benefit of the earmarking program, only as to those royalties which accrued on and after September 1, 1942, the Receiver felt that Hazel-Atlas was enjoying a preference over other licensees. He felt that all licensees should be treated equally and alike, and that Hazel-Atlas royalties accruing prior to September 1, 1942, should be transferred into the general operating funds of the company. All licensees would then stand upon an equal basis.

For this reason, and because the Receiver was in need of additional cash to carry on operations through the summer months of 1944, the Receiver requested the court to transfer from the impounded funds held in the registry of the court, to the general operating funds, the sum of $1,167,937.20, the amount deposited by Hazel-Atlas accruing prior to September 1, 1942, less the one-third Hazel-Atlas was entitled to deduct under the agreement of July 1, 1932.

Over the objection of both the Government and Hazel-Atlas Glass Company, the court granted the Receiver's request and on May 25, 1944, entered an order directing the clerk to transfer from the impounded fund to the general

---

[9] The impounded funds held in the registry of the court resulted from an order entered by the court on May 9, 1941, while the case was being tried. Upon application of the Government, the court required Hartford-Empire Company and Hazel-Atlas Glass Company to deposit in the registry of the court the payments due from each to the other under their general license agreement of July 1, 1932. A statement of the impounded funds as of June 30, 1944, will be found in the Appendix at page 51. Included in the statement are the deposits made by Corning Glass Works and Ball Brothers Company under the circumstances hereinbefore mentioned.

operating funds of the Receiver, the sum of $778,624.80. This was done, and the general funds of the company were thereby substantially replenished. A copy of the order of the court directing this transfer of funds is included in the Appendix hereof at pages 52-56.

The Receiver has in mind further plans for replenishing the general funds of Hartford-Empire Company, should that become necessary. The obvious source of further cash is the earmarked fund. If the Supreme Court should reverse the judgment of the District Court, of course, Hartford-Empire Company would receive all of the earmarked funds,[10] which by the end of the present year will amount to approximately $15,000,000.00

On the other hand, if the Supreme Court should affirm the judgment of the District Court, or that part of it dealing with the earmarking of royalties, Hartford-Empire Company would still be entitled to receive a substantial portion of the earmarked funds before those funds should be turned back to the licensees.

Paragraph 15 of the Final Judgment expressly makes provision for this contingency. It provides in part as follows:

> "* * * If no appeal from this judgment is taken by Hartford-Empire Company, or if an appeal is taken and the judgment is confirmed by the Supreme Court, each of such earmarked receipts so collected and set aside is to be returned, without interest, to

[10] This fund, if Hartford-Empire Company received it, would be subject to the claims of Hazel-Atlas Glass Company under the General License Agreement dated July 1, 1932. The Receiver has made no deposits with the Clerk of the District Court out of the earmarked funds, although paragraph 15 of the judgment might be construed to require it. The Receiver filed a petition for advice on this subject which has not been passed on. In the meantime, the funds are being preserved by the Receiver, subject to any instructions he may hereafter be given.

each of the licensees who shall have, or has, paid them to the Receiver, less any amounts paid out by the Receiver for the benefit of any such licensee and properly chargeable and allocable to any such licensee."

As we have pointed out hereinabove, the continuation of Hartford-Empire Company in business under the control of the Receiver has benefited substantially the licensees and the glass industry. Particularly have the licensees been benefited by the continuance of the engineering service, the research department and the furnishing of machinery and parts to the industry. Although difficult of exact measurement, those benefits are capable of fair appraisal by the court and the Receiver contemplates the filing of a petition with the court with notice to all parties affected, of a hearing before the court when evidence can be taken as to the value and benefit to the licensees of the continued operations of Hartford-Empire Company under the Receiver. While it is not possible to predict what the evidence will show the value of these services to be, it is certain that Hartford-Empire and the Receiver will be entitled to a substantial portion of the earmarked funds, which should be sufficient to repair any depletion in Hartford's cash and assets, resulting from the earmarking of the royalty income.

The suggestion, therefore, that the receivership has been, or will be, injurious to Hartford-Empire Company by "forfeiting its cash assets," is not warranted by the facts.

Hartford-Empire Company has at no time during the receivership been embarrassed by a lack of cash or working capital, and there is no probability that any prejudice will result to Hartford in the future on that account. Furthermore, the earmarking of the royalty income of Hartford, pending decision of the Supreme Court, should not result in depriving Hartford of any of its assets or cash. The Receiver hopes and believes that at the termination of the

receivership the assets of Hartford-Empire Company can be turned back to it without any impairment whatsoever, resulting from the temporary operations of the Receiver.

The court will observe that the securities of the company which are highly liquid and marketable, have not been materially impaired during the receivership. The value of the securities on August 31, 1942, was $1,397,396.54; as of June 30, 1944, the value was $1,340,952.18.

With the approval of the officers of Hartford-Empire Company and the court, the Receiver has sold some of the securities and purchased others, in order to strengthen the portfolio. Some of the securities have been redeemed, or been called, and the Receiver, with the funds realized, has purchased tax savings notes and sound bonds. It has been unnecessary to sell any of the securities for the purpose of obtaining cash for operations, and the Receiver does not contemplate that it will be necessary in the future to do so.

4. Preserving the Hartford-Empire Organization, Including the Executive and Employee Personnel

When the Receiver began operations on September 1, 1942, he found that Hartford possessed a well-balanced organization of employees and an adequate physical plant with facilities for carrying on research, development and experimental work. For efficiency in operation the company's employees had been grouped into eight or nine departments, working in harmony and co-ordination with one another. The company had 419 employees, most of whom were highly skilled in the work to which they were assigned. Among these employees were inventors, engineers, machine designers, chemists, physicists, draftsmen, technicians, and other trained employees.

The following table shows the number and classifica-

tion of employees on the payroll of Hartford-Empire Company on September 1, 1942:

ORGANIZATION

Department	Number of Employees
1. Research	56
2. Development	38
3. Licensee Engineering, Field and Industrial Service	84
4. Furnace and Glass Service	8
5. Market Research and Development	3
6. Sales-License and Production	20
7. Financial	26
8. Patent	12
9. Administrative	22
Sub-Total	269
Metal and Clay Manufacturing	83
Optical Lens Blank Manufacturing	67
Total	419

This organization had been assembled, developed and trained over a period of years, and it was the duty of the Receiver to preserve it with as little change as possible pending the determination of the appeal.

The Receiver has cooperated in every way with Hartford to maintain and preserve this valuable organization. Soon after assuming his duties, the Receiver joined with the president of the company in preparing a notice to all employees advising them that it was the desire of the Receiver that the work of the company should proceed as usual and that all employees continue to give their cooperation and support.

In the meantime, the Receiver was making a study of the salaries of the executive officers and the wages of the employees. He reached the conclusion that the salaries

were not excessive or out of line with the salaries usually paid for comparable work and responsibility. No reduction of salaries has been made by the Receiver.

In the matter of wages, the Receiver and his counsel have conferred and filed applications with the Wage Stabilization Director of the Regional War Labor Board and with the Salary Stabilization Unit of the Bureau of Internal Revenue to obtain adjustments with respect to wages and salaries. An approval has been obtained by the Receiver for numerous increases in pay for various individuals and groups of employees. The object of these efforts, carried on with the cooperation of the officers of the company, was to satisfy the employees by obtaining for them maximum increases to which they were entitled under wartime restrictions and regulations.

The Receiver also continued in effect the bonus system which had been established by the company prior to the receivership and helped to obtain the approval of the Regional War Labor Board to a continuation of the bonus system.

Prior to the receivership, the company had encouraged its employees to purchase shares of stock in the company under a Stock Purchase Agreement Plan. Many employees had taken advantage of this plan and were purchasing stock by applying on the purchase price dividends received upon the stock. The decision of this court naturally had an adverse effect upon the value of the shares of stock of the company, and the Receiver, as has been stated hereinbefore, ordered dividends discontinued pending clarification in the company's affairs.

What had at one time appeared to be an attractive proposition for the employees was now a burden, and the Receiver felt that these employees should be relieved from the obligations under their Stock Purchase Agreements if they so desired. He, therefore, filed a petition for advice

and instructions with the court and obtained an order permitting all employees who had entered into such agreements, at their option, to cancel such agreements and receive back the money already applied toward the purchase price.

When the Receiver took over Hartford, the company had already entered into an agreement with the Springfield Ordnance Department for the manufacture of lens blanks for optical instruments for the armed forces. About 70 men were engaged in this work. This Optical Department had just been organized a few months before and the operations had not been profitable. The Receiver, however, continued with the contract and approved additional contracts for the production of lens blanks and also approved an agreement with the Chemical Warfare Service for the production of materials needed by the Government. These operations never proved profitable to the company or the Receiver, but they were of help to the Government and at the same time did have some benefit to the organization from the standpoint of the morale of the employees, who were pleased that the Hartford organization was engaged in work directly related to the war effort.

The Receiver has heretofore filed with the court three reports in which the nature of the war contracts and the work done thereunder have been described in detail. In the latter part of 1943, this department was abandoned inasmuch as the Government had acquired other sources for the production of these materials.

Hartford-Empire Company now has about 330 employees. During the receivership many employees have entered the armed services. A few have left the company and obtained work elsewhere. Only two or three of the more highly-skilled employees have left the company. These men left because they obtained other positions with greatly increased salaries and responsibilities.

Hartford-Empire Company has recognized the efforts of the Receiver in preserving the Hartford organization. In the Annual Report for the year 1942 sent to the shareholders of the company in the spring of 1943 by the president of the company, Mr. F. Goodwin Smith, the following statement is contained:

> "I also desire to state that the Receiver, Mr. Shanley, with his counsel, Messrs. Fraser, Effler, Shumaker & Winn, of Toledo, have been most cooperative and have done all they could to keep the company's business intact and to keep our organization satisfied."

The period has been a difficult one for Hartford-Empire Company. Employees have been uncertain as to the future of the company in view of the court decisions which have been rendered. Naturally, there has been a temptation to seek employment elsewhere where conditions seemed more permanent and stable. Nevertheless, with the help of the Receiver, the organization for the past twenty-two months has been kept substantially intact.

5. The Effect of the Receivership Upon Litigation Involving Hartford-Empire Company

At the time the Receiver was appointed Hartford-Empire Company was already engaged in litigation aside from the anti-trust case. Two important suits were based upon alleged fraud and violation of the anti-trust laws by Hartford. They were patterned, to some extent, upon the government suit against Hartford and others in the anti-trust case. Both sought to recover treble damages against Hartford.

One of these cases was brought by The Turner Glass Company against Hartford-Empire Company and other defendants to recover damages in the amount of $5,000,-

000.00 and treble damages for acts alleged to be in violation of the anti-trust laws. That suit is pending in the United States District Court for the Southern District of Indiana, Indianapolis Division.

Another important suit pending at the time the receivership began was the Hartford-Empire Company action against Glenshaw Glass Company to collect royalties in the amount of approximately $70,000.00. In this action, Glenshaw Glass Company has filed a counterclaim against Hartford-Empire Company to recover actual damages in the amount of $1,000,000.00 and treble damages for acts alleged to be in violation of the anti-trust laws. This suit is pending in the United States District Court for the Western District of Pennsylvania.

Hartford-Empire Company also had pending an appeal in the United States Circuit Court of Appeals for the Second Circuit from an adverse decision of the United States Tax Court. Since the appointment of the Receiver, the Circuit Court of Appeals has affirmed the decision of the Tax Court, and upon *certiorari* filed by Hartford-Empire Company, the Supreme Court has denied a review.

There was also pending at the beginning of the receivership an arbitration proceeding between Hartford-Empire Company and Hazel-Atlas Glass Company. That proceeding was allowed by the Receiver to continue and resulted in a decision by the arbitrator in favor of Hartford-Empire Company.[11]

In addition to the foregoing there were also pending

[11] Hazel-Atlas Glass Company, with leave of court, has filed a petition in the United States District Court for the Northern District of Ohio, Western Division, against Hartford-Empire Company and the Receiver seeking to vacate and set aside the award of the arbitrator. This case, like the other litigation referred to, is pending, awaiting the decision of the Supreme Court of the United States in the anti-trust case appeals.

three patent infringement cases brought by Hartford-Empire Company against Obear-Nester Glass Company, Reed Glass Company and Jeannette Glass Company, respectively. These suits had been dormant for some time before the appointment of a Receiver and have since remained in a state of quiescence.

Finally, at the time the Receiver was appointed, there was pending in the United States Circuit Court of Appeals for the Third Circuit a petition by Hazel-Atlas Glass Company against Hartford-Empire Company to review the decision of that court rendered in 1932 (59 F. 2d 399), based upon disclosures concerning the Clarke article developed at the trial of the anti-trust case in Toledo. There was also pending a similar suit brought by Shawkee Manufacturing Company, *et al.*, vs. Hartford-Empire Company in the same court. Those cases have since reached the Supreme Court and have been determined adversely to Hartford-Empire Company.

The Receiver, by his counsel, has investigated and familiarized himself with all of the foregoing litigation. The Receiver has not, however, intervened or appeared in any of the cases.[12] The litigation is in charge of attorneys selected by Hartford, who are allowed full liberty of action in handling the suits. The Receiver has, however, exercised a general supervision over litigation and its expense where, to do so, did not involve his taking a position inconsistent with the decision of the District Court.

In the appeal by Hartford to the Supreme Court in the anti-trust case, and in the litigation in the Third Circuit Court of Appeals and the Supreme Court, involving the

[12] The Receiver did file a brief with the arbitrator in the arbitration proceeding between Hazel-Atlas Glass Company and Hartford-Empire Company.

Clarke article, the Receiver has not participated, in any respect, in the litigation.

Hartford has been permitted to choose its own counsel and make its own arrangements concerning the handling of these litigations without any interference by the Receiver. The Receiver has exercised a general supervision over the expenses of such litigation. In the anti-trust case appeal the Receiver, with the approval of the court, has insisted that Hartford-Empire Company should not be charged with more than its fair proportion of the expenses involved in printing the record, used in common by all the appellants. He has aided counsel for Hartford-Empire Company in the appeal to obtain fair allowances on account for fees and expenses; otherwise, he has not interfered.

Since the Receiver was appointed, no new litigation has been started against Hartford-Empire Company, except the suit brought by Hazel-Atlas to vacate the award of the arbitrator, reference to which has been made above.

Has the existence of the receivership prevented the filing of expensive and ruinous litigation against Hartford-Empire Company?

It is probable that the receivership has had that effect. A dozen or more licensees, since the inception of the receivership, have been paying royalties to the Receiver under protest and with a reservation of their rights against Hartford. Whether these companies contemplate the filing of actions for treble damages against Hartford after the determination of the appeals by the Supreme Court is not known, but it is likely that some of them will do so.

That no such action has been brought against Hartford heretofore may be due to the fact that a court officer has been in charge of Hartford's assets and affairs. There have been rumors, too, of contemplated suits by stockholders for fraud and mismanagement. Treble damage suits have actually been threatened.

Had there been no Receiver, it is most likely that Hartford would have been beset and harassed by a multiplicity of litigation which might have seriously interfered with its organization and business, and brought demoralization and bankruptcy upon the company.

After the decision of the Supreme Court, should that decision result in an affirmance of the judgment of the District Court, Hartford may still have to contend with numerous treble damage suits and stockholders' claims; but, for twenty-two months at least, no such suits have been instituted. Whether the receivership has prevented the filing of such suits cannot be known for a certainty, but it is probable that it has been an effective factor and shield for the temporary protection of the company against such litigation.

6. Miscellaneous

In addition to the foregoing major tasks with which the Receiver has had to deal in conserving Hartford-Empire Company and its assets, there have been other duties which the Receiver has performed for the benefit of the company. The Receiver has assisted the company in its numerous tax problems, including advice in the preparation and filing of Federal Income Tax Returns, and in the preparation and filing of returns in the several states in which Hartford-Empire Company has property and business. There have been special situations with respect to state taxes, particularly in the State of Connecticut, which have required considerable attention by the Receiver and his counsel.

The Receiver has also cooperated with Hartford-Empire Company and its subsidiary, Plax Corporation, in the furnishing of information and the conducting of conferences relating to renegotiations of war contracts, and

the proposed investigation of the reasonableness of royalty charges under the Royalty Adjustment Act.

The Receiver has cooperated with the company in its endeavor to obtain advice and assistance from experts in planning the future course of business of Hartford in view of the judgment in the anti-trust case and possible modification thereof by the Supreme Court. The Receiver, with the approval of the court, authorized Hartford-Empire Company to retain the services of an industrial expert to make a thorough study of Hartford's position and business prospects, and to file a report with recommendations.

The Receiver has given his approval to every reasonable request made by Hartford officers affecting its business, so that the company could maintain its standing as a going concern until final determination had been made by the courts concerning its status and its future. In numerous transactions and ways not mentioned here, the Receiver has tried to be constructive and helpful to Hartford in the management of its business.

SUMMARY AND CONCLUSION

The receivership has not harmed Hartford-Empire Company nor interfered unduly with its property or normal business operations. It may have been inconvenient, or at times embarrassing to Hartford to have a receiver in charge of its affairs, but the advantages to the company in this interim period surely have outweighed the temporary disadvantages.

Entirely aside from the restraints and the control of Hartford which the court has been able to exercise through its Receiver, pending final action by the Supreme Court, the receivership has been the means, and perhaps, the only practicable means, of preserving the Hartford organiza-

tion and business, until such time as the judgment of the court has been reviewed by the Supreme Court.

Without the protection and help of a court officer, it is difficult to believe that Hartford could have survived the shock of the court's decision and the long period that has intervened between the date of its announcement and the date of final action in the Supreme Court. For the reasons which have been set out above, it seems likely that its license and lease system would have immediately collapsed, royalties would not have been paid, agreements would not have been renewed, the company would have been assailed with ruinous litigations, and disintegration and bankruptcy might have followed before a review could be had.

The temporary receivership has helped to prevent that from taking place. Until the Supreme Court finally determines the issues relating to relief, at least the Hartford organization and business have been maintained and preserved intact.

August 28, 1944.

Respectfully submitted,

JAMES A. SHANLEY,
Receiver of Hartford-Empire Company.

ROSS W. SHUMAKER,
JOHN W. WINN,
ALAN B. LOOP,
FRASER, SHUMAKER, KENDRICK & WINN,
Toledo, Ohio,
Of Counsel.

APPENDIX

COLLECTIONS FROM LICENSEES ON NOTES AND ACCOUNTS RECEIVABLE FOR ROYALTIES

For the period from September 1, 1942, to June 30, 1944

LICENSEE	Allocation of Collections: To General Funds (Royalties Accrued at Aug. 31, 1942)	Allocation of Collections: To Earmarked Funds (Royalties Accrued Subsequent to Aug. 31, 1942)
Collections on Notes Receivable for Royalties		
Seaboard Glass Bottle Co....	$ 4,140.00	
Collections on Accounts Receivable for Royalties		
Akro-Agate Co.	$ 699.41	$ 20,378.01
American Thermos Bottle Co.	2,599.08	26,057.97
Anchor-Hocking Glass Co....	92,249.60	2,042,105.59
Armstrong Cork Co.....	19,235.39	555,629.46
Audubon Wire Cloth Co.....	....	48.54
Ball Brothers Co.....	36,319.18	768,451.30
Bartlett-Collins Co.	2,611.03	48,005.65
Beaumont Co.	52.50	425.00
Brockway Glass Co.....	14,284.24	373,568.41
Buck Glass Co.....	2,881.24	57,901.64
Carr-Lowrey Glass Co.....	7,238.46	238,911.97
Chattanooga Glass Co.....	6,410.96	152,999.72
Cincinnati Advertising Products Co.	75.00	75.00
Corning Glass Works.....	11,495.51	181,190.36
DeMuth Glass Works.....	60.00	390.00
Diamond Glass Co.....	5,706.09	130,014.49
E. I. DuPont de Nemours Co..	233.33	466.67
Fairmont Glass Works.....	11,604.26	243,821.65
Federal Glass Co.....	14,482.32	207,980.56
Fenton Art Glass Co.....	52.50	395.00
Florida Glass Mfg. Co.....	760.33	13,779.99
Foster-Forbes Glass Co.....	11,028.97	220,724.05

Licensee	Allocation of Collections: To General Funds (Royalties Accrued at Aug. 31, 1942)	Allocation of Collections: To Earmarked Funds (Royalties Accrued Subsequent to Aug. 31, 1942)
Gaynor Glass Works	3,531.13	64,691.56
General Refractories	44.80	....
Gillinder Bros.	65.00	737.50
Glass Containers, Inc.	4,406.74	174,021.09
Gleason-Tiebout Co.	65.00	510.00
H. J. Heinz Co.	57.50	2,435.00
Indiana Glass Co.	275.54	39,496.48
Inland Glass Works	....	1,150.00
Jeanette Glass Co.	202.50	1,680.00
Jeanette Shade and Novelty Co.	218.33	1,058.34
Alexander H. Kerr Co.	145.00	8,791.60
Kimble Glass Co.	1,470.85	39,991.94
Knox Glass Bottle Co.—Mississippi.	10,862.85	131,486.97
Knox Glass Bottle Co.—Pennsylvania	9,560.55	103,971.04
Knox Glass Bottle Co.—Texas	10,728.29	117,048.17
Lamb Glass Co.	3,361.92	66,348.78
Lancaster Lens Co.	167.87	4,237.50
Latchford Marble Glass Co.	5,717.65	112,835.58
Laurens Glass Works	6,332.47	127,691.08
Libbey Glass Co.	989.46	32,712.56
Liberty Glass Co.	3,829.33	98,659.26
Lincoln Glass Bottle Co.	....	86,046.64
Lynch Corp.	800.00	7,100.00
Mahoning Glass Works	4,759.82	13,445.07
Marienville Glass Co.	17,999.78	129,502.66
Maryland Glass Corp.	8,758.44	233,864.21
Maywood Glass Co.	2,705.52	96,975.04
McKee Glass Co.	1,124.52	6,345.20
Metro Glass Bottle Co.	12,912.56	143,367.14
Northwestern Glass Co.	1,882.75	60,033.93
Ohio City Glass Bottle Co.	12,846.42	99,277.68
Olean Glass Co.	31,052.21	42,905.19
Owens-Illinois Glass Co.	69,347.46	1,742,108.30

Licensee	Allocation of Collections: To General Funds (Royalties Accrued at Aug. 31, 1942)	Allocation of Collections: To Earmarked Funds (Royalties Accrued Subsequent to Aug. 31, 1942)
Owens-Illinois Pacific Coast Co.	35,840.54	756,822.69
Pennsylvania Bottle Co.	15,038.51	157,466.78
Perfection Glass Corp.	34.17	270.00
Phoenix Glass Co.	416.71	4,787.98
Pierce Glass Co.	1,929.08	130,939.28
Pitney Glass Works	....	755.00
Pittsburgh-Corning Glass Co.	....	24,777.93
Seaboard Glass Bottle Co.	31,838.77	143,492.43
Seneca Glass Co.	52.50	417.50
Sterling Glass Division of The Warfield Co.	5,519.35	46,835.04
Swindell Bros., Inc.	5,293.23	98,150.04
Thatcher Mfg. Co.	17,792.01	650,323.12
Tygart Valley Glass Co.	11,150.58	230,268.48
Universal Glass Products Co.	2,451.45	58,140.86
T. C. Wheaton Co.	813.14	81,621.78
Wightman Bottle and Glass Mfg. Co.	13,328.77	136,017.97
Totals—Collections on Accounts Receivable	$603,942.31	$11,594,933.42

EARMARKED FUNDS AND DEPOSITARIES

Name of Bank	Deposits as of June 30, 1944	Deposits as of August 3, 1944
Bank of The Manhattan Co., New York, N. Y.	$ 2,000,000.00	$ 2,250,000.00
Chemical Bank & Trust Co., New York, N. Y.	1,950,000.00	2,250,000.00
First National Bank of Hartford, Conn.	4,587,301.74	1,371,781.93*
First National Bank & Trust Co., New Haven, Conn.	700,000.00	750,000.00
Hartford-Connecticut Trust Co., Hartford, Conn.	750,000.00	750,000.00
Manufacturers Trust Co., New York, N. Y.	1,400,000.00	1,750,000.00
Commercial National Bank & Trust Co., New York, N. Y.	....	750,000.00
The Chase National Bank of New York	....	2,000,000.00
Total	$11,387,301.74	$11,871,781.93

*This represents the deposits in the First National Bank of Hartford, Conn., as of close of business on July 31, 1944. It does not reflect deposits made on August 1, 2 and 3, 1944.

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS—EARMARKED FUNDS

	Period from Sept. 1, 1942, to June 30, 1944	
Additions to Earmarked Funds		
Collections on Royalty Accounts Accrued Subsequent to August 31, 1942.....		$11,594,933.42
Disbursements from Earmarked Funds		
Salary of the Receiver,.....$	44,000.00	
Legal Fees and Expenses...	106,710.70	
Accounting Fees and Expenses.....	54,373.44	
Expenses of the Receiver....	547.54	
		207,631.68*
Balance in Earmarked Funds at June 30, 1944.....		$11,387,301.74

*These expenses have been paid from the earmarked funds, but are subject to future allocation by the District Court as between the earmarked and general funds on the basis of benefits resulting from the Receiver's operations.

BALANCE SHEETS

ASSETS

		June 30, 1944	August 31, 1942
Current Assets			
General Funds		$ 1,304,906.65	$ 3,297,420.28
Marketable Securities		1,340,952.18	1,397,396.54
Notes and Accounts Receivable (Not Earmarked)	$381,248.02		
Less Reserve for Doubtful Accounts	56,622.72		
		324,625.30	995,033.54-A
Accrued Interest Receivable		5,275.95	4,163.83
Inventories		1,004,842.32	1,019,054.84
Total Current Assets		3,980,602.40	6,713,069.03
Receiver's Earmarked Assets			
Cash	$11,387,301.74		
Accounts Receivable	664,073.90		
		12,051,375.64	———
Miscellaneous Notes and Accounts Receivable			
Glenshaw, Vidriera, B-H-F Syndicate, Plax Corp. and Stock Purchase Accounts	$171,503.32		
Less Reserve for Doubtful Accounts	71,422.65		
		100,080.67	55,465.68-A
Investments in Affiliated Companies		1,329,318.93	1,269,318.93
Land, Buildings and Equipment	$1,623,699.36		
Less Reserve for Depreciation	1,000,676.85		
		623,022.51	708,716.96
Licensed Machines	7,624,506.94		
Less Reserve for Depreciation	3,897,454.21		
		3,727,052.73	3,437,423.78
Patent and License Rights	11,855,705.33		
Less Reserve for Amortization	10,136,522.42		
		1,719,182.91	2,825,120.71
Deferred Charges			
Unexpired Insurance, Etc.		70,659.02	121,986.46
Totals		$23,601,294.81	$15,131,101.55

Note A—The asset and liability accounts indicated at August 31, 1942, have been reclassified as between "current" and "non-current," to conform to classifications presently in use.

LIABILITIES

		June 30, 1944	August 31, 1942
Current Liabilities			
Accounts Payable—Trade		$ 278,565.68	$ 149,886.03
Account Payable to Hazel-Atlas Glass Company—Schedule No. 1, Current Portion		2,035.49	211,404.70-A
Accrued Liabilities			
Federal Taxes on Income—Prior Years	$268,260.00		
Other Taxes	97,794.97		
		366,054.97	1,070,330.57-A
Advance from Funds Impounded by the U. S. District Court		778,624.80	———
Portion of Term Obligation (Below) Due Within One Year		6,000.00	6,350.00-A
Total Current Liabilities		1,431,280.94	1,437,971.30
Term Obligations			
Corning Glass Works, Inc.	1,012,500.00		
Harold T. Edwards (Total $11,195.00 less current portion $6,000.00 as shown above)	5,195.00		
		1,017,695.00	1,029,900.00
Account Payable to Hazel-Atlas Glass Company—			
Schedule No. 1	6,140,561.24		
Less Payments Made to the U. S. District Court	2,346,707.24		
Unpaid Balance	3,793,854.00		
Less Current Portion Shown Above	2,035.49		
		3,791,818.51	332,517.75-A
Deferred Income			
Unearned Machine Rentals	2,411,028.88		
Unamortized Balance of Hazel-Atlas' Payment for Participation in Divisible Income	20,000.00		
		2,431,028.88	2,397,686.53
Reserves			
For Contingencies	4,295,902.48-B		
For Obsolescence of Patent Rights	1,200,000.00		
For Obsolescence of Licensed Machines	335,000.00		
		5,830,902.48	2,741,912.01
Capital			
Common Capital Stock	3,944,925.39		
Surplus	5,153,643.61		
		9,098,569.00	7,191,113.96
Totals		$23,601,294.81	$15,131,101.55

Note B—The reserve for contingencies is the excess of the amounts accrued on the books for Federal and State taxes over amounts paid or currently payable for the years 1935 to date, for which period the company's liability for principal taxes has not been finally determined.

STATEMENT OF PROFIT AND LOSS

	From Sept. 1, 1942, to June 30, 1944
Income from Royalties and Parts Sales	
Royalties	$12,268,504.98
Gross Profit on Sales	410,122.25
	12,678,627.23
Participation of Hazel-Atlas Glass Co.	3,457,078.62
	9,221,548.61
Other Operating Income	
Earned Machine Rentals	1,196,013.83
Engineering and Other Services	86,728.30
Amortization of Hazel-Atlas' Payment for Participation in Divisible Income	73,334.00
	1,356,076.13
Total Operating Income	10,577,624.74

Operating Expenses	
Research and Development	790,869.48
Departmental Salaries	1,223,937.81
Departmental Expenses	782,409.21
Depreciation and Amortization	1,575,010.39
	4,372,226.89
Net Operating Profit	6,205,397.85
Other Income	
Income from Securities	149,082.48
Profit from Sale of Securities	6,522.43
Interest and Miscellaneous	6,270.49
Profit from Sale of Patents	4,176.47
	166,051.87
	6,371,449.72
Other Deductions	
Special Litigation Costs and Expenses	429,139.75
Expenses of the Receiver	219,340.31
Special Expenses—J. M. Barker	26,117.82
Loss from Machines and Parts Scrapped	32,356.53
	706,954.41
Net Profit Before Providing for Contingencies	5,664,495.31
Provision for Contingencies (Federal Taxes on Income) Note A	3,246,689.14
Net Profit for the Period	2,417,806.17

Note A—Provision for contingencies is the approximate amount of Federal Taxes on income that would be payable if royalties accrued subsequent to August 31, 1942, were held to be taxable income.

CASH DISBURSEMENTS—GENERAL FUNDS
For the Period from September 1, 1942, to June 30, 1944

	Period from Sept. 1, 1942, to June 30, 1944
Transactions Applicable to August 31, 1942, Balances	
Accounts Payable—Trade	$ 140,693.39
Accounts Payable—Employees	1,525.44
Accrued Pay Roll	13,852.85
State, Local and Pay Roll Taxes	121,479.12
Federal Income Taxes—1941	567,494.07
Term Contract Payable	12,555.00
Affiliated Company Account	4,203.96
Payment into the Registry of the U. S. District Court of Hazel-Atlas' Participation to August 31, 1942	209,369.21
	$1,071,173.04
Transactions Originated Subsequent to August 31, 1942	
Purchases of Materials, Supplies and Direct Labor	$2,808,278.59
Departmental Salaries	
Engineering	633,442.65
Industrial Engineering	48,468.46
Experimental Engineering	144,715.03
Sales License	379,515.69
Market Research	30,010.55
Patent Law	113,883.60
Administrative	188,913.24
Financial	106,863.30
Departmental Expenses	
Engineering	196,956.55
Industrial Engineering	31,852.38
Experimental Engineering	66,548.75
Sales License	218,245.21
Market Research	23,283.42
Patent Law and Litigation	44,556.53
Administrative	119,447.00

Financial	6,847.24
Legal Fees and Expenses	
Anti-Trust Suit	240,717.17
Glenshaw Glass Company Suit	38,815.62
Turner Glass Company Suit	43,536.25
State, Local and Pay Roll Taxes	111,830.58
Insurance	91,867.98
Employees' Bonus	33,426.18
Expense of the Receiver's Office	11,208.63
Purchase of U. S. Government Securities	517,096.00
Advances to Employees	6,649.36
Advances to Plax Corporation	120,000.00
Additions to Plant and Equipment	22,010.56
Refund of License Fee Deposits	2,800.00
Federal Taxes on Income—1942	361,881.18
Purchase of War Savings Bonds for Employees	27,896.68
Special Expense—J. M. Barker	13,617.82
Refund of Employees' Stock Purchase Contracts	15,865.00
	6,821,047.20
Total	$7,892,220.24

ADDITIONS TO GENERAL FUNDS

		Period from Sept. 1, 1942, to June 30, 1944
Balance in General Funds at Beginning of Period		$3,297,420.28
Additions to General Funds		
Transfer from Impounded Funds by Order of the U. S. District Court	$ 778,624.80	
Collections on Charges Accrued at Aug. 31, 1942		
From Licensees		
Notes Receivable—Royalties	4,140.00	
Notes Receivable—License Fees	59,000.00	
Notes Receivable—Parts, Etc.	5,000.00	
Interest on Above Notes	1,392.56	
Accounts Receivable—Royalties	603,942.31	
Accounts Receivable—License Fees	142,420.00	
Accounts Receivable—Parts, Etc.	118,929.94	
From Other Than Licensees		
Notes Receivable—Employees	2,185.00	
Accounts Receivable—Customers, et al.	31,122.65	
Interest and Dividends from Investments	2,768.55	
Refunds of Traveling Advances	4,100.00	
Sales of Investments	579,591.79	
Collections on Charges Accrued Subsequent to August 31, 1942		
From Licensees		
Notes Receivable—License Fees	32,100.00	
Notes Receivable—Parts, Etc.	6,000.00	
Interest on Above Notes	2,118.00	
Accounts Receivable—License Fees	1,149,004.24	
Accounts Receivable—Parts, Etc.	1,638,450.99	
From Other Than Licensees		
Accounts Receivable—Customers, et al.	509,752.93	
Interest and Dividends from Investments	145,718.34	
Refunds of Traveling Advances	3,541.54	
Cafeteria Sales	17,008.75	
Employees' War Savings Bond Deposits	29,219.22	
Notes Receivable—Employees	1,900.00	
Recovery on Fire Loss	31,675.00	
Total Additions		5,899,706.61
		9,197,126.89
Disbursements from General Funds		7,892,220.24
Balance in General Funds at June 30, 1944		$1,304,906.65

IMPOUNDED FUNDS

For the month of June, 1944, and for the period from September 1, 1942, to June 30, 1944

	Paid Into the Court by Hartford-Empire Company (Hazel-Atlas Participation)	Hazel-Atlas Glass Co. (Royalties)
For the Month of June, 1944		
Balance at Beginning of Month	$2,137,338.03	$2,671,663.69
Additions to Impounded Funds Paid in During Month	209,369.21	90,783.09
	2,346,707.24	2,762,446.78
Disbursement from Impounded Funds Transfer to General Funds	....	778,624.80
Balance at End of Month	$2,346,707.24	$1,983,821.98
For the Period from September 1, 1942, to June 30, 1944		
Balance at Beginning of Period	$2,137,338.03	$1,167,937.20
Additions to Impounded Funds Paid in During Period	209,369.21	1,594,509.58
	2,346,707.24	2,762,446.78
Disbursement from Impounded Funds Transfer to General Funds	....	778,624.80
Balance at End of Period	$2,346,707.24	$1,983,821.98
Paid in by Ball Bros. Co.	$ 425,000.00	
Paid in by Corning Glass Works	112,500.00	
Total		$4,868,029.22

IN THE
DISTRICT COURT OF THE UNITED STATES
FOR THE NORTHERN DISTRICT OF OHIO
WESTERN DIVISION

No. 4426 Civil

United States of America,

Plaintiff,

vs.

Hartford-Empire Company et al.,

Defendants.

ORDER
Approved and Filed May 25, 1944

This cause having come on for hearing upon the petition of the Receiver filed herein on January 6, 1944, concerning the replenishment of the general operating funds of the Receiver, and the same having been fully heard upon the evidence in open court on January 14, 1944, and submitted to the court upon the briefs of counsel, the court finds as follows:

1. That a copy of said petition and due and timely notice of hearing thereon were served upon all interested parties, to-wit: United States of America, Hazel-Atlas Glass Company and Hartford-Empire Company, and that all of said parties appeared by counsel and participated in the hearing on January 14, 1944, and filed briefs with the court.

2. That at the close of business on August 31, 1942, prior to the Receiver taking over on September 1, 1942, Hartford-Empire Company had cash on hand and on deposit in the amount of $3,297,420.28. Under the operations of the receivership, with all royalties accruing since Sep-

tember 1, 1942, being segregated and earmarked by the Receiver, in accordance with the judgment and orders heretofore entered herein, the cash on hand and on deposit in the general operating funds of the Receiver had declined to approximately $1,257,000 as of January 12, 1944—the rate of decline averaging about $162,000 each month; and that, according to advice furnished by the Receiver, the balance on hand and on deposit in said funds at the date of this order is approximately $800,000.

3. That it now appears probable, the appeal to the Supreme Court herein having been reinstated on the docket for reargument in October, 1944, that the Receiver must continue to operate Hartford-Empire Company under the judgment and orders of this court for a period of at least six months from the date of this order before the decision of the Supreme Court will be handed down; and that, in the interim, it is necessary in order to provide the Receiver with adequate funds with which to carry on the operation of Hartford-Empire Company, to protect the judgment of the court, preserve the *status quo* and to prevent the liquidation of Hartford-Empire Company pending final decision by the Supreme Court, that additional cash be allocated and transferred to the Receiver. To provide such additional cash it appears from the evidence most feasible and just at the present time to resort to the fund now held in the registry of the court representing payments deposited by Hartford-Empire Company and Hazel-Atlas Glass Company under the agreement between said companies, dated July 1, 1932, and the order of this court entered herein on May 9, 1941.

4. That the funds that have been collected, segregated and earmarked by the Receiver amounting as of May 15, 1944, to approximately $10,318,000, representing royalty payments made to the Receiver by licensees, other than Hazel-Atlas Glass Company, which were earned or accrued

subsequently to September 1, 1942, should not be invaded, or any part thereof made available to the Receiver for general operations, until notice shall have been given to all licensees affected, and a full hearing shall have been had concerning the value of the benefits accruing to said licensees from the continued operation and services of Hartford-Empire Company during the receivership.

5. That the only other source of operating funds for the Receiver is the securities of Hartford-Empire Company having a market value as of March 31, 1944, of approximately $1,340,952.18, and the court finds that said securities should not be sold or pledged by the Receiver at this time, but should be held available for use in any emergency with which Hartford-Empire Company or the Receiver may be confronted in the interim until final decision by the Supreme Court of the pending appeals.

6. That as of April 30, 1944, the total amount of the funds impounded in the registry of the court was $5,273,203.58, representing deposits made as follows:

By Hartford-Empire Company	$2,137,338.03
By Hazel-Atlas Glass Company	2,598,365.55
By Ball Bros. Company	425,000.00
By Corning Glass Works	112,500.00
Total	$5,273,203.58

and that of the amounts deposited by Hazel-Atlas Glass Company in said fund, the sum of $1,167,937.20 represents royalties which were earned or accrued prior to September 1, 1942, of which, under the agreement of July 1, 1932, Hartford-Empire Company would have been entitled to two-thirds, or $778,624.80.

7. That under the order entered by this court on December 16, 1942, all royalties paid to the Receiver by licensees of Hartford-Empire Company, other than Hazel-Atlas Glass Company, which accrued or were earned prior

to September 1, 1942, were transferred into the general funds of the Receiver and made available for the general operations of the Receiver; and that Hazel-Atlas Glass Company has enjoyed a preference over other licensees of Hartford-Empire Company, in that the royalties which it has deposited into the registry of the court, accruing prior to September 1, 1942, have not heretofore been released and transferred to the Receiver for general operating purposes.

8. That under the terms of the impounding order entered herein on May 9, 1941, there is due the fund from the Receiver and payable out of the general funds of Hartford-Empire Company in his possession, the sum of $209,369.21 representing payments due for the months of July and August, 1942, from Hartford-Empire Company to Hazel-Atlas Glass Company under the agreement of July 1, 1932, and this amount should be deposited by the Receiver with the clerk.

9. That the release from the impounded funds of the sum of $778,624.80 and the transfer thereof to the Receiver will in no way prejudice Hazel-Atlas Glass Company, inasmuch as final allocation, distribution and use of the impounded funds must await the decision of the Supreme Court; that sufficient funds deposited by Hartford-Empire Company under the impounding order are available so that any necessary adjustments between the parties can be made after final decision by the Supreme Court, and in accordance with its directions, or with principles of equity; and that this order will not unduly reduce the amount of the impounded funds nor disturb or interfere with the objects and purposes for which said fund was established by the order of the court entered herein on May 9, 1941.

To place all licensees of Hartford-Empire Company on the same basis, and to provide additional cash for the general operating funds of Hartford-Empire Company, it is,

Logan

therefore, ordered that the sum of $778,624.80 be released from the registry of the court and transferred to the Receiver of Hartford-Empire Company and made available for the general operating funds of the Receiver, and the clerk is hereby directed to take whatever steps are necessary to release said sum and transfer the same to the Receiver in accordance with this order.

It is further ordered that upon receipt by the Receiver of said sum of $778,624.80 in accordance with this order, the Receiver shall, out of the general funds in his hands, deposit with the clerk of the court the sum of $209,369.21.

This order is not intended as a modification of any of the terms or provisions of the judgment entered herein on October 8, 1942, now pending on appeal to the Supreme Court, nor as a final determination as to the rights of any party in or to the impounded funds, all questions as to the final distribution, allocation and use of such impounded funds being reserved for future determination in accordance with equitable principles and subject to any directions of the Supreme Court.

(Signed) FRANK L. KLOEB,
United States District Judge.